

PROJECT INFORMATION

Project Title	Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project
Brief Description	The Dutch Flat Creek Enhancement/Nelson Ranch Sustainability project will improve wetland resources, water quality, and the operation of a third generation working ranch. The project is unique in that it involves enhancing a large creek which will result in improving crops used for hay production. The integration of enhancing the streambank to improve crops involves stabilizing stream banks while also creating crossing locations within the stream for wheels of a center pivot system. The wheel crossing locations serve two purposes: 1) allow a hardened and stable surface for wheels to roll; and 2) provide grade control within the stream which is entrenched. Neither the RCD, landowners, nor Natural Resource Conservation Service staff have worked with this type of integration, however, all agree that it can be done. Based on past success of the RCD working within entrenched stream channels, this project will serve as a model for stabilizing a streambank while producing highly productive hay adjacent to it.
Total Requested Amount	149,777.00
Other Fund Proposed	16,500.00
Total Project Cost	166,277.00
Project Category	Site Improvement/Restoration
Project Area/Size	3000
Project Area Type	Feet
Have you submitted to SNC this fiscal year?	Yes
Is this application related to other SNC funding?	Yes

Project Results
Enhancement
Restoration

Project Purpose	Project Purpose Percent

County
Modoc

Sub Region
North

PROJECT CONTACT INFORMATION

Name	Ms. Sharmie Stevenson,
Title	Business Manager
Organization	Pit Resource Conservation District
Primary Address	P.O. Box 301, , , Bieber, CA, 96009
Primary Phone/Fax	530-399-3405 Ext.
Primary Email	pitrcd@hdo.net

PROJECT LOCATION INFORMATION

Project Location

Address:	Nelson Ranch-Dutch flat Creek, , , Adin, CA, 96006 United States
Water Agency:	n/a
Latitude:	41.2421042
Longitude:	-120.92982
Congressional District:	n/a
Senate:	n/a
Assembly:	n/a
Within City Limits:	No
City Name:	

ADDITIONAL INFORMATION

Grant Application Type

Grant Application Type:
Category One Site Improvement

Grant Application Type:
Category One Site Improvement

PROJECT OTHER CONTACTS INFORMATION

Other Grant Project Contacts
Name: Mr. Todd Sloat, Project Role: Day-to-Day Responsibility Phone: 5303365456 Phone Ext: E-mail: tsloat@citilink.net

UPLOADS

The following pages contain the following uploads provided by the applicant:

Upload Name
Completed Application Checklist
Table of Contents
Full Application Form
Authorization to Apply or Resolution
Other Supporting Documentation
Narrative Descriptions
CEQA Documentation
Other Supporting Documentation
Other Supporting Documentation
Other Supporting Documentation
Other Supporting Documentation
Detailed Budget Form
Restrictions/Agreements
Regulatory Requirements or Permits

Letters of Support
Long Term Management Plan
Long Term Management Plan
Project Location Map
Project Location Map
Project Location Map
Parcel Map Showing County Assessors Parcel Number
Topographic Map
Photos of the Project Site
Other Supporting Documentation
Land Tenure- Only for Site Improvement Projects
Site Plan - Only Site Improv. or Restoration Proj.
Site Plan - Only Site Improv. or Restoration Proj.
Leases or Agreements

To preserve the integrity of the uploaded document, headers, footers and page numbers have not been added by the system.



Preservation of Ranch and Ag Lands

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**DUTCH FLAT CREEK ENHANCEMENT/NELSON RANCH SUSTAINABILITY
PROJECT**

PIT RESOURCE CONSERVATION DISTRICT

SNC CAT 1 SITE IMPROVEMENT PROPOSAL

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Preservation of Ranch and Ag Lands

UPLOAD UNAVAILABLE OR INVALID

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In the matter of: A RESOLUTION APPROVING THE SUBMITTAL OF A GRANT APPLICATION FOR GRANT FUNDS FOR THE PROPOSITIN 84 GRANT PROGRAM UNDER THE SIERRA NEVADA CONSERVANCY.

The following RESOLUTION was duly passed by the Board of Directors of the Pit Resource Conservation District (Pit RCD) at a regular meeting held September10, 2012, by the following vote:

Ayes: 4

Noes: 0

Abstentions: 0

Absent: 0

Signed and approved by:

Buck Paul
Chair, Board of Directors

ATTEST:

Clerk of Said Board

Shamir Sappor

WHEREAS, the Legislature and Governor of the State of California have provided funds for the program shown above; and

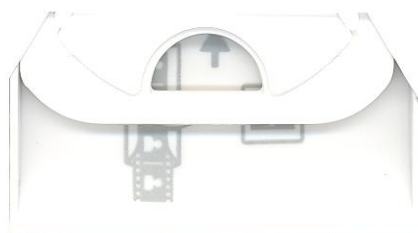
WHEREAS, the Sierra Nevada Conservancy (SNC) has been delegated the responsibility for the administration of a portion of these funds through a local assistance grants program, establishing necessary procedures; and

WHEREAS, said procedures established by the SNC require a resolution certifying the approval of application(s) by the Applicant's governing board before submission of said application(s) to the SNC; and

WHEREAS, the Applicant, if selected, will enter into an agreement with the SNC to carry out the project;

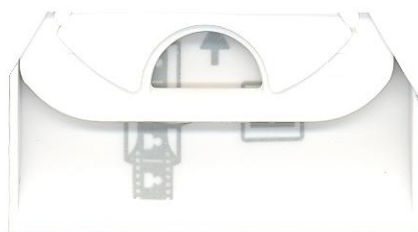
WHEREAS, the Pit RCD has identified the **Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project** as valuable toward meeting its mission and goals.

BE IT HEREBY RESOLVED by the Board of Directors of the Pit RCD that this Board approves the submittal of application for the Dutch Flat Creek Enhancement and Nelson Ranch



Sustainability Project and certifies that Applicant understands the assurances and certification requirements in the application and certifies that Applicant or title holder will have sufficient funds to operate and maintain the resource(s) consistent with the long-term benefits described in support of the application or will secure the resources to do so and certifies that Applicant will comply with all legal requirements as determined during the application process and appoints Todd Sloat and/or Sharmie Stevenson as agents to conduct all negotiations, execute and submit all documents, including but not limited to: applications, agreements, payment requests, and so on, which may be necessary for the completion of the aforementioned project(s).

PASSED AND ADOPTED by the Pit Resource Conservation District on the 10th day of September, 2012.



5a. Detailed Project Description Narrative

Project Summary: The Dutch Flat Creek Enhancement/Nelson Ranch Sustainability project will improve wetland resources, water quality, and the operation of a third generation working ranch. The project is unique in that it involves enhancing a large creek which will result in improving crops used for hay production. The integration of enhancing the streambank to improve crops involves stabilizing stream banks while also creating crossing locations within the stream for wheels of a center pivot system. The wheel crossing locations serve two purposes: 1) allow a hardened and stable surface for wheels to roll; and 2) provide grade control within the stream which is entrenched. Neither the RCD, landowners, nor Natural Resource Conservation Service staff have worked with this type of integration, however, all agree that it can be done. Based on past success of the RCD working within entrenched stream channels, this project will serve as a model for stabilizing a streambank while producing highly productive hay adjacent to it.

Environmental Setting Narrative: The project area lies within a small fault-block valley (10,000 acres) that was once a lake during the Pleistocene era. Prior to European settlement, the valley was likely a very large meadow system with stringers of riparian vegetation. Ash Creek, Dutch Flat Creek, North Fork Ash Creek, Rush Creek, and Barber Creek all flow into the valley and then exit via Ash Creek near the town of Adin. Several creek reaches, including Dutch Flat Creek were straightened to minimize marshy areas and improve range conditions and hay production. Through time, several factors including straightening, poorly designed/managed bridges and culverts, and overgrazing, resulted in degraded riparian and aquatic conditions within the stream. Dutch Flat Creek has become entrenched. Its base elevation is approximately 6-8 feet lower than historic levels and its width is likely 7-10 times wider. As described in the channel evolution process described by Schum et al. (1984), the creek continues to widen and has developed an inset floodplain. It is still very unstable in most areas, and during high flows, streambanks slough off and contribute high levels of sediment. In some areas, a diverse herbaceous vegetation exists in the stream along with occasional willow clumps.

The Nelson Ranch was purchased in the early 1900's by the current landowner's grandfather. The primary commodities produced when it was first purchased are still the same today – cattle and hay. However, the recent proliferation of pivot systems and their efficient use of water has improved the financial return for hay producers. In addition, hay prices have risen in recent years and many landowners in the region are replacing hand and wheel lines with pivot systems. The Nelson Ranch owners have decided to purchase and install three pivot systems, two of which will be planned to irrigate hay on both sides of Dutch Flat Creek. Currently, alfalfa and pasture grass are irrigated with wheel lines on the east side of the creek, and dry-land pasture is raised on the west side of the creek. The west side of the creek will be planted with pasture grass and alfalfa, while the east sides will remain in alfalfa.

Biological and cultural resource surveys were conducted as part of the planning and design process. No threatened or endangered species occur on the site, or have a high potential to occur on the site. Several special-status species are known to occur in the region, and some of these species are known to occur or have a moderate potential of occurring on the site. The project will be constructed at a time to avoid impacts on any known species (e.g. nesting raptors) and will not result in any adverse impacts on federally or state threatened/endangered species. There are no known archeological sites on the project.

Construction methods include operating dirt moving machinery (e.g. excavator, loader, scraper) to remove or add soil to create benches, move and place rocks, and remove dirt from higher elevation areas in order to minimize erosive flood forces in the floodplain. This disturbance area has been calculated to be approximately 3.5 acres.

Consistency with Proposition 84 and SNC Goals: This project will directly improve water quality and aquatic and terrestrial natural resources, and will conserve water. These improvements are consistent with three program areas identified within Proposition 84, and consistent with its mandate to protect and restore rivers, lakes and streams, their watersheds and associated land, water, and other natural resources. Water quality improvements will consist of reduced sedimentation and lower water temperature. Riparian vegetation, both herbaceous and deciduous shrubs will expand in density and area. Also, aquatic habitat will improve as the width/depth ratio of water within the creek will be greater after enhancement work. The overall linear distance of stream improved is 3,000 feet and the acreage estimated for the disturbed area during construction is 3.5 acres. Replacement of the wheel lines will increase sprinkler irrigation efficiency by 20%. In addition to meeting Proposition 84 goals, the project will address six of the seven SNC goals as described below.

1. Provide increased opportunities for tourism and recreation: The project will not provide increased opportunities for tourism, but will improve habitat conditions for recreation. Through improved habitat conditions, incremental improvement in fish and wildlife related pursuits (e.g., hunting, bird watching, wildlife viewing) can be expected in the project area. In addition, the landowner is committed to showing this project to anyone interested in learning about the integration of streambank enhancement with pivot irrigation.

2. Protect, conserve, and restore the region's physical, cultural, archeological, historical, and living resources: The project will protect, conserve and restore physical and living resources in the form of naturally functioning streams, associated riparian habitat, and agriculture land. Many tributary streams within the upper Pit River Watershed, especially those owned and managed in large valleys, are degraded from a variety of past management practices. This project will demonstrate that streambank and channel stabilization techniques can be integrated with a center pivot sprinkler system that crosses the creek. Multiple resource benefits will occur that other private landowners may observe and follow. Fish species will also indirectly benefit from restoration due to an expected increase in summer base flows, cooler water temperatures, and the

retention of channel pools during the dry season. Surveys by qualified archaeologists have been conducted and no sensitive sites were found.

3. *Aid in the preservation of working landscapes* – The project will directly conserve and improve the agricultural activities on the Nelson Ranch while also minimizing the loss of valuable land through erosion. Improved habitat conditions will result that benefits livestock foraging and eliminates the replacement costs for fences, pumps, and buried mainline that currently occur from the erosion.

4. *Reduce the risk of natural disasters, such as wildfires*: The enhancement of meadow and riparian vegetation will reduce fire hazard because these areas remain “green” during the dry season. This condition will provide a more natural and fire-resistant landscape.

5. *Protect and improve water and air quality*: The proposed project will directly improve water quality within Dutch Flat Creek. Improved water quality includes reduced water temperatures (from the formation of deeper pools), reduced sediment (as a result of less concentrated flows and denser vegetation), and increased dissolved oxygen (from the turbulence created from water flowing over the rock vanes).

6. *Assist the regional economy through the operation of the SNC program*: The project will improve long-term economic outputs to the local economy through reducing infrastructure costs, purchasing of materials (e.g. rock) and supplies (e.g. fuel), hiring local contractors, and improving agricultural productivity. Many project services and materials are commonly available from local vendors who will in turn support the regional economy with their payrolls and taxes. The contractors responsible for designing and permitting this project also are local, and a pool of skilled heavy equipment operators with this type of project experience is available. This availability of local personnel for all aspects of project implementation ensures that project payroll funds will largely stay in the region.

7. *Undertake efforts to enhance public use and enjoyment of lands owned by the public*. The proposed project has no measureable connection to this SNC program goal.

Project Goals and Outcomes:

Goal 1- Support the long-term economic viability and ecological value of the Nelson Ranch: The integration of streambank and aquatic habitat enhancement with the installation of new irrigation system and crops is vital for the landowner to continue working the ranch. The habitat improvements will not only benefit natural resources on-site, but will also benefit downstream habitat with improvements in water quality and migratory habitat for fish and wildlife.

Goal 2 – Improve the natural form and function of the stream and floodplain: Through channel streambank stabilization and floodplain redesign, the project will help connect the creek with its current floodplain. True restoration of Dutch Flat Creek in Round

Valley does not seem feasible for a multitude of reasons (e.g. houses and other infrastructure are built within the historic floodplain, high value crops are growing on the historic floodplain). However, in some reaches, such as this project area, the creek is showing signs of stabilization within its new floodplain. This project will build on those natural processes and speed the recovery and stabilization of the stream and floodplain. Improving the stream channel to its floodplain will directly affect the linear feet (estimated at 3,000) of streambank enhanced (Performance Measure 6), and acres of land improved (Performance Measure 13). Improving the connection of the stream to the floodplain will provide a mechanism for trapping sediment as discussed in Goal 3, and create in-stream habitat diversity for fish species.

Goal 3 – Stop soil erosion at the site: Eliminating the existing erosion along the outward bends of the creek will be accomplished by installing rock vanes, resloping the bank, planting vegetation, and managing the area to encourage dense vegetative growth. Once completed, the outward bends will slow water velocity and stop lateral erosion.

Goal 4 – Improve habitat values for the site: Achieving Goals 2 and 3 will result in improved habitat value for biological species at the site. The rock vanes will re-direct flow toward the center of the stream channel and create a deeper pool, thus increasing instream habitat diversity for fish. Bank stabilization will result in a denser and more vigorous riparian community along the streambanks and this provides important cover for local wildlife species (e.g. deer, resident and migratory birds). Finally, the improved habitat conditions along the riparian areas and floodplain will encourage growth of native plants that may out compete some noxious weeds (e.g. Scotch thistle).

Goal 5 -- Minimize long-term maintenance and loss of agriculture infrastructure: Achieving Goals 2 and 3 will result in minimizing long-term maintenance to ensure existing agriculture infrastructure (e.g. fences, pumps, irrigation pipe) are not destroyed from streambank erosion.

Goal 6 – Document the Performance Measures (No. 1-4) identified in the SNC SOG 1 Grants Program: Four Performance Measures identified within the SOG Grant Program will be documented throughout the life of the project. This will include estimating the number of people who read newspaper and newsletter articles, recording the number of people who attend meetings where the project is discussed or presented, and recording the dollar value of resources leveraged, the number and types of jobs created, and the number of new, improved, or preserved economic activities.

Success Criteria: Project success criteria have been established to document whether the project goals will be met. Criteria has been identified for hydrology and vegetation.

Hydrologic Success Criteria: The project will be successful if Dutch Flat Creek does not actively erode the streambank in the project area. Spring and fall monitoring will consist of a thorough site inspection of terrestrial and aquatic conditions on-site. The inspection will include recording pre and post project photographs and associated notes.

In addition to photo-monitoring, pre and post project construction cross section data will be recorded to show changes in streambed habitat diversity and width to depth ratios of the stream channel.

Vegetative Success Criteria: Vegetation is expected to convert from bare dirt and sparsely vegetated areas to a diversity of herbaceous species and willows along the streambank. This will include establishing and developing riparian areas along the outward and inward bends of the creek where the bench and rock vanes are created. The project will be successful if the riparian-deciduous shrub community increases from its present state by a factor of three and the total ground cover increases from existing percentage of 40% to 85%.

The extent (acreage) of riparian vegetation and ground cover will be measured prior to project construction, and then again at year five. The acreage estimate will be conducted by using GPS to delimit polygons around riparian-deciduous shrubs, and the line-intercept method will be used to document percent cover.

5b. Workplan and Schedule Narrative

Table 1 lists the tasks, schedule, and constraining factors for this proposed project. Task No. 1 includes the day-to-day responsibilities of invoicing, corresponding, bookkeeping, and coordinating and preparing for RCD and other meetings. The Pit RCD Business Manager, Sharmie Stevenson, will conduct these duties for the life of the grant. There are no constraining factors associated with this task (total \$3,600).

Table 1. Tasks/Deliverables, timeline, and constraining factors

Tasks	Schedule	Constraining Factors
1. Administration	Life of grant	None
2. Post Design, Pre-Construction	March 2013 – July 2013	Receiving bids within the construction budget and timeline
3. Construction	July 2013 – October 2013	Wet weather, contractor quits
4. Reports, Monitoring, Outreach	July 2013 – March 2014	None

Task No. 2 includes the following activities that include preparing a construction bid, attending a pre-bid meeting, coordinating with the Construction Manager (StreamWise), and collecting any pre-construction data or performing any other pre-construction tasks (meeting with landowners, agencies, etc.). Only one constraining factor is associated with this task, and that includes receiving qualified bids that are within the construction budget and timeline. Several local qualified contractors (e.g. contractors that have constructed rock vanes associated with a streambank stabilization project) exist near the proposed project, and other contractors that are qualified, but may not have actually constructed rock vanes, are also present.

Task No. 3 is the construction phase of enhancement. This includes resloping constriction points within the inset floodplain, transporting fill material to low areas adjacent to the creek, constructing cross vanes, placing gravel, and replanting salvaged vegetation. Two constraining factors, wet weather, and the termination etc. of a contractor exist for this task. A construction bond will be required for this project to ensure the project can be completed if, for any unforeseen reason, the contractor is unable to complete the job, quits, or is released from the RCD for lack of execution. In order to avoid weather issues, the timeline of construction will start between mid-July and mid-August.

Task No. 4 includes post construction activities such as collecting as-built information, preparing outreach material, holding meetings to highlight the project, and preparing reports for funding sources. No constraining factors are associated with this task.

The project will be implemented efficiently by preparing a timeline and working diligently to complete tasks associated with the timeline. The Pit RCD has successfully “managed” several grant projects, and the same staff and contractors who implemented them are proposed for this project.

5c. Restrictions, Technical/Environmental Documents and Agreements

1. The landowner has signed a binding agreement with the Pit RCD for this project.
2. No conflicting easements, mineral rights, toxic contamination etc. exist that might affect the project area. Both of the parcels are enrolled in the Williamson’s Act.
3. The Pit RCD will conduct a wetland delineation and prepare a Pre-Construction Notification (e.g. Nationwide Permit No. 27) to comply with Section 404 of the Clean Water Act through the Army Corps (Corps) of Engineers if the project is funded. The RCD will also prepare and submit a 401 Certification to the Regional Water Quality Control Board and a Streambed Alteration Agreement (SAA) to the California Department of Fish and Game. The Natural Resource Conservation Service has conducted archeological surveys and notified State Historic Preservation Office (SHPO). The Pit RCD has successfully completed the above permitting processes for several projects and will use existing RCD funds and grant funds from other entities that are already secured to complete these steps. The Corps will also likely consult with SHPO after they review the PCN. The RCD has received a support letter from the landowner to ensure permission to conduct activities that are necessary to complete the project.

5d. Organization Capacity Narrative

The RCD has staff and consultants under existing contracts to implement the post-design and construction management portions of this project. Sharmie Stevenson, the Pit RCD Business Manager, has been serving this role for 15 years. She has successfully managed and is currently managing numerous grants (see below Table 2) similar to this project. The Pit RCD Watershed Coordinator (WC), Todd Sloat, who also serves as WC for the Fall River RCD, has managed numerous natural resource projects in recent years. Some of these projects are highlighted at <http://pitriveralliance.net/pitracd/> and are summarized in Table 2 below. The Board of

Directors, which currently consists of four private landowners in the district, has a broad range of experiences and connections with the local community. The RCD has also developed close relationships with local agency representatives from the Natural Resource Conservation Service, Department of Fish and Game, Department of Water Resources, Regional Water Quality Control Board, U.S. Forest Service, Bureau of Land Management, and the United States Fish and Wildlife Service. Relationships have also been formed with conservation groups such as Ducks Unlimited and the California Waterfowl Association. Because of these relationships and the success of past projects, the landowners in this rural community look to the RCD for assistance with natural resource projects, and view the RCD in a positive manner. The design was prepared by StreamWise, a local consulting firm that was selected by the Pit RCD during a competitive bidding process. StreamWise was also the design consultant and construction manager for other recent projects in the area. These projects have been highly successful at meeting stated project goals. See Table 2 below for a summary of recent Pit RCD projects.

If funded, it is the intent of the RCD to contract with Todd Sloat Biological Consulting, Inc. (Sloat Consulting) to serve as watershed coordinator for the proposed project and StreamWise to serve as the Construction Supervisor. By doing so, the RCD hopes to maximize the number of people and resources benefited by the project. Mr. Sloat has been the watershed coordinator for the Pit RCD for approximately eight years. During this time he has been an effective partner in coordinating activities between landowners, stakeholders, and agency people. Coordination on this scale is vital to preserving the area's watershed, as more than 50% of the land on the area's waterways is owned privately, and in many cases, generationally. Because Mr. Sloat was raised in the area, he has been able to relate to and influence many private landowners in productive and beneficial ways. In addition, he has successfully coordinated and managed several of the RCD's projects.

TABLE 2. Summary of Recent Pit RCD Projects and Projects Coordinated by their Watershed Coordinator

Project	Project Type	Schedule	Primary Funds and Value	Reference
Ash Creek Wildlife Area Restoration Project	Meadow restoration and infrastructure integration	Construction initiated in 2012	SNC (1 million); WCB (1.3 million); DWR (1.1 million)	Steve Burton, DFG, 530-459-1129
Harlow Meadow Restoration Project	Meadow restoration	Completed fall 2011	USFWS Partners (25K); Rocky Mt. Elk Found. (19K)	Pete Johnson, W.M. Beaty and Assoc., 530-335-2881

McBride Springs Meadow Restoration Project	Meadow restoration	Completed fall 2011	Lassen RAC (18K); NRCS (50K)	Buck Parks, Pit RCD President, 530-640-0715
Mason – Pit River stabilization project	Streambank stabilization and habitat enhancement (rock vanes, bank resloping, vegetation planting)	Constructed in October 2010	SNC (ca. 150K)	Gary Monchamp, 530-294-5596

5e. Cooperation and Community Support

The project has direct participation and support from the private landowner at the project site. Another important cooperative effort was the development of the *Pit RCD Watershed Management Strategy*, which identifies the project's adjacent locations as restoration priorities. This document was developed in consultation with a wide range of private stakeholders, in addition to other agencies (i.e., CDFG, NRCS, RWQCB, DWR) and stakeholders (Ducks Unlimited, California Waterfowl Association). During the WMS development process, stakeholders attended meetings, reviewed and wrote text, and provided input on resource issues within the watershed. Some of these adjacent projects were implemented in previous years and can be viewed on the Pit RCD website (see www.pitriverralliance.net/pitrtd). The Pit RCD has also discussed this project and garnered a letter of support from the Modoc County Board of Supervisors.

The project is compatible with other previous planning projects including the *Upper Pit River Watershed Management Strategy*. This strategy has goals or resource concerns that identify “meadow and stream projects” as important resource topics for their local communities. More recently, the project has been discussed and promoted through the Project Development subcommittee as part of the Upper Pit River Integrated Regional Water Management Plan development.

5f. Long-Term Management and Sustainability

The project occurs on private land that is currently managed by a father and son. The father has entered into an agreement with the Pit RCD. If the project is funded, it will allow the landowner to irrigate additional acreage and produce hay. Currently, hay production is one of the more profitable agriculture products in the region, and increasing the income potential of the landowner will enable them to financially manage the property in the manner that protects and enhances natural resources (e.g. stream corridor). Currently, the stream channel is in a degraded condition (see project photos). A Draft Management Plan has been prepared and is attached with this application. If the project is funded, the plan will be implemented and added as an addendum to the landowner agreement with the Pit RCD.

5g. Performance Measures Narrative

Performance Measures (PM) that will be documented as part of the project include PM 1-4, PM 6, and PM 13. The Table below lists the PMs and describes how they will be assessed and the responsible documenting entities.

Performance Measure (PM)	Responsible Entity and Description
PM 1. Number of people reached	The Pit RCD will publish at least one newspaper article and one newsletter article highlighting the project. The Watershed Coordinator will also present the project in at least two forums (e.g. neighboring RCD meeting, Cattlemen's meeting, natural resource related conference)
PM 2. Dollar value of resources leveraged for the Sierra Nevada	The Pit RCD and Sierra Institute for Community and Environment (SI) will track dollars leveraged.
PM 3. Number and types of jobs created	The Pit RCD will document the number and type of full-time-equivalent jobs created from the SNC funding
PM 4. Number of new, improved, or preserved economic activities	The Pit RCD and SI will document the number of new, improved, or preserved economic activities.
PM 6. Linear feet of streambank protected or restored	The Pit RCD will conduct a pre and post enhancement calculation of the linear feet of streambank protected.
PM 13. Acres of land improved or restored	The Pit RCD and landowner will document the acres of habitat and agriculture areas improved from project activities.

5h. Budget Narrative

Direct Costs: Direct costs in this budget pertain only to project work necessary to implement project construction. This includes coordination/management time (includes time to prepare reports), construction supervision, construction, materials, and equipment rental. All work will be conducted under contract. Watershed coordination costs in this budget pertain only to expenses directly related to project implementation. This line item assumes approximately 160 hours of work plus \$777 in expenses (i.e. mileage) over the life of the grant. The position of Pit RCD Watershed Coordinator is a contract position, currently filled by Mr. Todd Sloat, and supported by Todd Sloat Biological Consulting, Inc. Mr. Sloat and his company will serve as the lead for project implementation. The Watershed Coordinator will serve as grant manager, and will provide general oversight of all elements of the proposed project, including: a) oversight to all contracts and in-kind service agreements; b) leadership for all meetings, field tours, and other public contact functions; c) preparation of all documents, legal as well as informational, maps, and educational documents; and d) final editing, review and submittal of construction bid solicitations, monitoring reports, and other reporting requirements.

Construction Supervision: This line items will cover contract costs for a Construction Manager responsible for the restoration design plan during construction. Construction

supervision will be provided by Rick Poore of StreamWise and the Watershed Coordinator. This item allows for approximately 170 hours of service.

Construction: This line item will cover costs associated with a Contractor skilled in stream restoration and/or enhancement activities.

Materials needed for construction include rocks for construction of the vanes (\$8,600), and rock for filling in areas for wheel crossings (\$8,600). Equipment costs include rental of two excavators.

Indirect Costs: Indirect costs include Pit RCD staff time to complete outreach and education materials and activities, purchase of ink, and printing associated with a newsletter. It also includes a portion (15 %) of the RCD Workers Compensation costs.

Administrative Costs. Costs associated within this section are primarily for Pit RCD staff time for accounting associated with the proposed project and grant. These are estimated to be 10 hours/week for 42 weeks. These staff hours will be used for monthly billing, tracking and accounting of design contracts, etc. These hours will not be billed for any work that is not necessary for the completion of the proposed project (total \$ \$14,700). Other administrative costs include expenses associated with the operation of the RCD and include, audit, telephone, and utilities. It is assumed that implementation of the proposed project will account for approximately 25% of the RCD's operating costs, such as utilities, telephone, internet, insurance, audits, etc. These costs are estimated at approximately \$300.00 per month for the life of the grant (total \$3,600).

Other Project Contributions: See detailed budget for this information.

As shown in the Budget, the streambank enhancement portion of the project does not depend on funds other than those requested from SNC. If funding from SNC is received, these funds will be sufficient to complete the project. If this project is not completed, the existing erosion will continue and widen the inset floodplain, more land will be lost from soil erosion, aquatic and terrestrial habitat conditions onsite and downstream from the project site will continue to degrade, and more landowner infrastructure will be lost (e.g. pumps, fences). This process will occur until the stream has developed a "new" floodplain at a lower base elevation. More importantly for the landowner, the pivots will only be able to cover half of the irrigated area.

Other "hidden" costs, not often considered, include costs to landowners who must comply with regulatory programs (e.g. Regional Water Quality Agriculture Waiver Program) that are in part, developed because of poor watershed conditions (e.g. high sediment loading) that currently exist throughout the state. Once this site is enhanced, the natural process of the stream and floodplain will function and greatly reduce the amount of erosion currently occurring. Minimal costs will occur to landowners/managers in the future at this site.

**SIERRA NEVADA CONSERVANCY
PROPOSITION 84 - DETAILED BUDGET FORM**

Project Name: Dutch Flat Creek Enhancement/Nelson Ranch Sustainability Project

Applicant: Pit Resource Conservation District

SECTION ONE DIRECT COSTS¹	Units	Unit Cost	Total Cost	Year One	Total
Project Management/Coordination	160	125	\$20,000	\$20,000.00	\$20,000.00
Construction Supervision	170	125	\$21,250	\$21,250.00	\$21,250.00
Construction	340	105	\$35,700	\$35,700.00	\$35,700.00
Performance Measures and Reporting	80	100	\$8,000	\$8,000.00	\$8,000.00
Mileage for travel (@\$.55/mile)	1400	0.555	\$777	\$777.00	\$777.00
Rock for cross vanes and crossings	465	37	\$17,200	\$17,200.00	\$17,200.00
Equipment rental (2 excavators)	15	1500	\$22,500	\$22,500.00	\$22,500.00
DIRECT COSTS SUBTOTAL:			\$125,427	\$125,427.00	\$125,427.00

SECTION TWO INDIRECT COSTS				Year One	Total
Personnel Support (monitoring)	100	35	\$3,500	\$3,500.00	\$3,500.00
Project materials & supplies purchased	6	100	\$600	\$600.00	\$600.00
Publications, Printing, Public Relations	150	2.50	\$375	\$375.00	\$375.00
Workers Compensation Insurance			\$1,575	\$1,575.00	\$1,575.00
INDIRECT COSTS SUBTOTAL:			\$6,050	\$6,050.00	\$6,050.00
PROJECT TOTAL:			\$131,477	\$131,477.00	\$131,477.00

SECTION THREE Administrative Costs (Costs may not to exceed 15% of total Project Cost) :						Total
Rent, audit, telephone, utility	12	300	\$3,600	\$3,600.00		\$3,600.00
Administrative Costs	420	35	\$14,700	\$14,700.00		\$14,700.00
ADMINISTRATIVE TOTAL:			\$18,300	\$18,300.00		\$18,300.00
SNC TOTAL GRANT REQUEST:			\$149,777	\$149,777.00		\$149,777.00

SECTION FOUR OTHER PROJECT CONTRIBUTIONS²				Year One	Total
<i>List other funding or in-kind contributors to project (i.e. Sierra Business Council, Department of Water Resources, etc.)</i>					
Landowner				\$5,000.00	\$5,000.00
NRCS				\$6,500.00	\$6,500.00
Pit RCD				\$5,000.00	\$5,000.00
Total Other Contributions:				\$16,500.00	\$16,500.00

NOTE: The categories listed on this form are examples and may or may not be an expense related to the project. Rows may be added or deleted on the form as needed. Applicants should contact the SNC if questions arise.

* Operating Costs should be allocated to the percentage that is applicable to the grant based on your cost allocation methodology and cannot exceed 15% of your total project costs.

¹ Direct Cost. Most of the work to be accomplished under the proposed project will be under contract.

² Other Project Contributions. Contributions from the landowner and NRCS are shown in the detailed Budget. Landowner contributions consist of in-kind services associated with the project. In-kind services include meetings during project development and implementation. They also include maintenance of streambank vegetation as well as attending site visits for the public. All in-kind and volunteer service will be documented and reported and are estimated to include 100 hours @ \$50.00/hr. The landowners has also already invested nearly \$200,000 dollars to purchase and install mainline and the pivot systems. The NRCS has cost-shared a portion of this cost, and has also budgeted \$6,500 for revegetation efforts along DFC. Funds from the Pit RCD will be used to pay for permit preparation and submission. This is estimated to amount to \$5,000.00.

6c. Restrictions, Technical Documents, and Agreements.

A special-status wildlife- fish-botanical report is attached. Also attached is an email to NRCS documenting their process of evaluating cultural resources.

PIT RESOURCE CONSERVATION DISTRICT LANDOWNER AGREEMENT

Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project

THIS AGREEMENT is made and entered into by and between the Pit Resource Conservation District, a special district of Lassen County, State of California, and Alan Nelson. This agreement is for a watershed restoration project on property that is located in the Pit RCD boundary described as follows:

T39N, R9E, Section 9,10, & 11
Parcel #s – 01821047 & 01820021

A. Terms Defined:

1. The word “**District**” refers to the Pit Resource Conservation District.
2. The word “**Landowner**” refers to the party that owns the land where project work is being performed.
3. The acronym “**PRCD**” refers to the Pit Resource Conservation District.

B. Statement of Purpose:

The District has received certain funding from grant sources with funds to be utilized in an effort to improve water quality within the District boundaries and the Pit River Watershed. In an effort to pursue these goals, performance measures will be taken to stabilize stream banks, restore proper meadow functions, and implement the recommended best management practices;

C. Terms and Conditions of Project Restoration:

Landowner shall be responsible for supervising, carrying out and completion of fencing and alternative water sources on the aforementioned property where livestock are involved when appropriate. Landowner, or agent, shall provide the material, equipment, workers, compensation and liability insurance necessary to install fencing and alternative water sources necessary for livestock during the project construction when appropriate. The work to be done will be set forth in detail in the project plans and specifications. The District shall provide the capital for the project and the maintenance requirement that will be subject to the landowner's approval.

1. The District will prepare specifications and maintenance goals for the project plan. The project plan will be referred to as Attachment 1.
2. The District or its agent shall be responsible for continued inspection of the project in progress and shall be responsible for acceptance of the project, with the Landowners concurrence, upon completion.
3. The Landowner shall provide reasonable access to the District, as necessary, for the performance and evaluation of the project, until projects are completely implemented. In addition, for a period of 10 years, the District will have access, with prior Landowner notification, for semi-annual project reviews.
4. The Landowner agrees not to materially alter or in any way diminish the effectiveness of all implemented projects for a period of 10 years.



5. The Landowner agrees that the intent of this project is only to control bank erosion and to restore the function of the meadow system and the projects implemented are based on currently accepted practices that may have some inherent risk of failure. The Landowner and District agree that reasonable modifications to the work plan may be made during the implementation of the project.
6. The District agrees that the Landowner's liability for any losses or injuries shall be limited to the cost of repairing the implemented project if the project is shown not to meet plans and specifications. The Landowner agrees to maintain the integrity of the implemented project for a period of 10 years.
7. The Landowner shall be responsible for any and all financial contributions or in-kind match that the Landowner and the District agreed upon prior to project commencement as outlined in the grant proposal(s).
8. The District shall be responsible for selection of project design, contractor and materials for implementation where necessary. The Landowner shall have input on all of the above matters unless the landowner enters into a contract agreement with another entity whereby the landowner willingly foregoes there right of input.
9. The Landowner agrees to complete the project even in the event of a sale of the property to another owner. The Landowner will disclose to the 3rd party the project and its stipulations. The 3rd party will be required to sign a new Landowner agreement with the District.
10. The Landowner will receive no compensation for the project from the District unless the District is a contributing financial partner to the project, or unless the Landowner pays for expenses that are mutually agreed upon as reimbursable for the project.
11. Landowner will assist the District and its agents in obtaining necessary permits for project work.
12. The District will not be responsible for losses or damage to personal property, equipment, or material of Landowner except in cases of gross negligence and shall only be responsible for replacement or repair.
13. The terms of this agreement herein contained shall apply to and shall bind and inure to the benefit of the heirs, representative, assigns and successors in interest of the parties hereto.
14. The Landowner and any and all agents and employees of the Landowner shall not act in an independent capacity and not as officers or employees of the District.
15. The Landowner agrees that in no event shall the District be required to perform any maintenance on or make repairs or alterations to the property except as defined in the design plan.
16. This agreement shall remain in full force and effect upon its execution until terminated. The District may terminate this agreement at any time for non-compliance with this agreement.
17. Either party may terminate this agreement without cause by providing written notification 30 days prior to termination and before construction begins.



This agreement shall be binding upon the parties hereto, and upon their successors, legal representatives and assigns. Any modification of the Agreement shall be in writing and by mutual consent of the parties.

This agreement shall become effective when executed by all parties.

Pit Resource Conservation District, P.O. Box 301, Bieber, CA 96009

By: *Tim Balcoff*
Director, Pit RCD

10/18/2012
Date

John J. Rouse
Director, Pit RCD

10/18/2012
Date

Paul Park
Director, Pit RCD

10/18/2012
Date

Director, Pit RCD

Date

Director, Pit RCD

Date

By: *Alan Nelson*
Landowner

8/31/2012
Date

Witness: *Shamir Simpson*
Pit RCD Employee



Appendix B3

CEQA/NEPA Compliance Form

(California Environmental Quality Act & National Environmental Policy Act)

Instructions: All applicants, including federal agencies, must complete the CEQA compliance section. Check the box that describes the CEQA status of the proposed project. You must also complete the documentation component and submit any surveys, and/or reports that support the checked CEQA status. NOTE: There is no page limit requirement on this form. You may use the space you need to fully describe the CEQA/NEPA status of this project.

If NEPA is applicable to your project, you must complete the NEPA section in addition to the CEQA section. Check the box that describes the NEPA status of the proposed project. Complete the documentation component and submit any surveys, and/or reports that support the NEPA status.

For both CEQA and NEPA, submittal of permits is only necessary if they contain conditions providing information regarding potential environmental impacts.

CEQA STATUS

(All applicants must complete this section)

Check the box that corresponds with the CEQA compliance for your project. The proposed action is either “Not a Project” under CEQA; is Categorically Exempt from CEQA; or requires a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report per CEQA.

☐ **“Not a Project” per CEQA**

1. Describe how your project is “Not a Project” per CEQA:

2. If appropriate, provide documentation to support the “Not a Project” per CEQA status.

☒ **Categorical Exemption or Statutory Exemption**

If a project is categorically exempt from CEQA, all applicants, including public agencies that provide a filed Notice of Exemption, are required to provide a clear and comprehensive description of the physical attributes of the project site, including potential and known special-status species and habitat, in order for the SNC to make a determination that the project is exempt. A particular project that ordinarily would fall under a specific category of exemption may require further CEQA review due to individual circumstances, i.e., it is within a sensitive location, has a cumulative impact, has a significant effect on the environment, is within a scenic highway, impacts an historical resource, or is on a hazardous waste site. Potential cultural/archaeological resources must be noted, but do not need to be specifically listed or mapped at the time of application submittal. Backup data informing the exemption decision, such as biological surveys, Cultural Information Center requests, research papers, etc. should

accompany the full application. Applicants anticipating the SNC to file an exemption are encouraged to conduct the appropriate surveys and submit an information request to an office of the California Historical Resources Information System (CHRIS).

1. Describe how your project complies with the requirements for claiming a Categorical or Statutory Exemption per CEQA:

See attached NOE prepared and submitted to Modoc County

2. If your organization is a state or local governmental agency, submit a signed, approved Notice of Exemption (NOE) documenting the use of the Categorical Exemption or Statutory Exemption, along with any permits, surveys, and/or reports that have been completed to support this CEQA status. The Notice of Exemption must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.

See attached stamped NOE from Modoc County

3. If your organization is a nonprofit or federal agency, there is no other California public agency having discretionary authority over your project, and you would like the SNC to prepare a NOE for your project, let us know that and provide any permits, surveys, and/or reports that have been completed to support the CEQA status.

-
- ☐ **Negative Declaration OR**
☐ **Mitigated Negative Declaration**

If a project requires a Negative Declaration or Mitigated Negative Declaration, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.

1. Describe how your project complies with the requirements for the use of a Negative Declaration or a Mitigated Negative Declaration per CEQA:

2. Submit the approved Initial Study and Negative Declaration/Mitigated Negative Declaration along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The IS/ND/MND must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.

☐ **Environmental Impact Report**

If a project requires an Environmental Impact Report, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.

1. Describe how your project complies with the requirements for the use of an Environmental Impact Report per CEQA:

2. Submit the Draft and Final Environmental Impact Report along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The EIR documentation must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.

NEPA STATUS

(Applicable to federal applicants, some tribal organizations, and applicants receiving federal funding or conducting activities on federal lands)

Check the box that corresponds with the NEPA compliance for your project.

☐ **Categorical Exclusion**

1. Describe how your project complies with the requirements for claiming a Categorical Exclusion per NEPA:

2. Submit the signed, approved Decision Memo and Categorical Exclusion, as well as documentation to support the Categorical Exclusion, including any permits, surveys, and/or reports that have been completed to support this NEPA status:

☐ **Environmental Assessment & Finding of No Significant Impact**

1. Describe how your project complies with the requirements for the use of an Environmental Assessment and Finding of No Significant Impact per NEPA:

2. Submit the signed, approved Environmental Assessment and Finding of No Significant Impact along with any permits, surveys, and/or reports that have been completed to support this NEPA status.

☐ **Environmental Impact Statement**

1. Describe how your project complies with the requirements for the use of an Environmental Impact Statement per NEPA:

2. Submit the Draft and approved, Final Environmental Impact Statement, along with the Record of Decision and any permits, surveys, and/or reports that have been completed to support this NEPA status.

Alan & Kathie Nelson

P.O. Box 235

Adin, CA 96006

Sierra Nevada Conservancy

11521 Blocker Drive, Suite 205

Auburn, CA 95603

October 18, 2012

To Whom It May Concern:

This is a letter of support for the Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project. The Pit Resource Conservation District (Pit RCD) is seeking grant funding from your organization to implement this project which will improve streambank vegetation and reduce erosion on 6,000 feet of Dutch Flat Creek.

After observing the success of a project that was completed directly downstream from us on Dutch Flat Creek we realized the importance of projects like this to the health of the stream and the land.

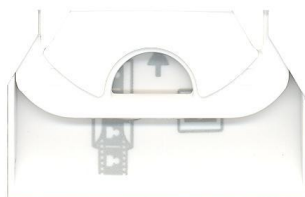
We ask that you seriously consider funding the application from the Pit RCD as they have a proven track record in resource conservation practices and projects in the Pit River Watershed. Thank you for your consideration of our request.

Sincerely,



Alan & Kathie Nelson

Landowners



Draft Management Plan

This draft Management Plan (MP) has been developed between the landowner, Natural Resource Conservation Service staff, and Pit Resource Conservation District. While the long-term management of the project area is the responsibility of the landowner, the landowner has entered into a binding agreement with the Pit RCD for a period of 10 years following construction. The MP has been developed to ensure project goals and success criteria are met. It includes an adaptive approach that recognizes differences in annual climate variation can greatly affect the vegetative responses. The MP has been designed to primarily address the inset floodplain along Dutch Flat Creek (DFC).

Livestock Grazing: Livestock grazing is a component of the Nelson Ranch and includes the production of 150 head of cattle/year. The Nelson Ranch currently has an allotment where the cows are transported to the forest during the late spring/early summer (early April) and then recovered during fall. During the winter, they are transported to the Central Valley on December 1st and return to the ranch on April 1st. When the cattle are on the ranch, they graze non-irrigated and irrigated pasture during the spring and fall and are fed hay that is produced on the ranch during the winter time. DFC does not produce an important amount of forage habitat for the production of livestock. It does, however provide an important source of water when they graze on adjacent pastures. The project intends to convert the non-irrigated pasture for the north pivot system to irrigated pasture. This proposed new pasture, along with land to the west, will provide important feed for livestock during the spring and fall. DFC will be one of two primary watering sources for these livestock. Grazing will not occur until at least one year has passed after project construction in order for the vegetation to become established in disturbed areas and along the creek corridor. Electrical fencing is proposed to keep livestock out of the stream corridor during this time.

Livestock grazing will not occur along DFC in the southern pivot system because alfalfa is proposed to be planted and grown in this area. A fence will be built to separate the northern and southern pivots which will exclude livestock from DFC in the southern portion of the project area.

Invasive Weeds: Two invasive weeds are common within Round Valley and along the creeks. They include Scotch thistle and Dyer's woad. The landowner will spray and/or dig these two species each year at the appropriate time (prior to seed production) for the period of the agreement. Treatment of these species will limit their abundance and distribution along the creek and reduce the number of seeds that can be carried downstream to other landowners.

Riparian Vegetation Maintenance: The pivot system can clear vegetation and other structural features (e.g. fence posts) for a height of eight feet. Most willow currently growing within DFC is less than this height and the pivot is expected to cross freely. However, Oregon Ash also occurs within the creek to a much lesser extent and this

species often grows much higher than willow. The landowners will regularly cut willows and Oregon Ash that exceed the clearance height of the pivot system.

Wheel Crossing, Rock Vanes, and Streambank Maintenance: Some adjustments of the streambanks, channel, and rock vanes will occur from high flow events. In instances where the adjustments do not allow the wheels of the pivot to move freely, maintenance will be conducted. The maintenance will consist of adjusting rock placements within the vanes, clearing willows, and smoothing out gravel. This maintenance is expected to be minimal and will likely occur within the first two years.

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Figure 1a. Project Vicinity w/APN

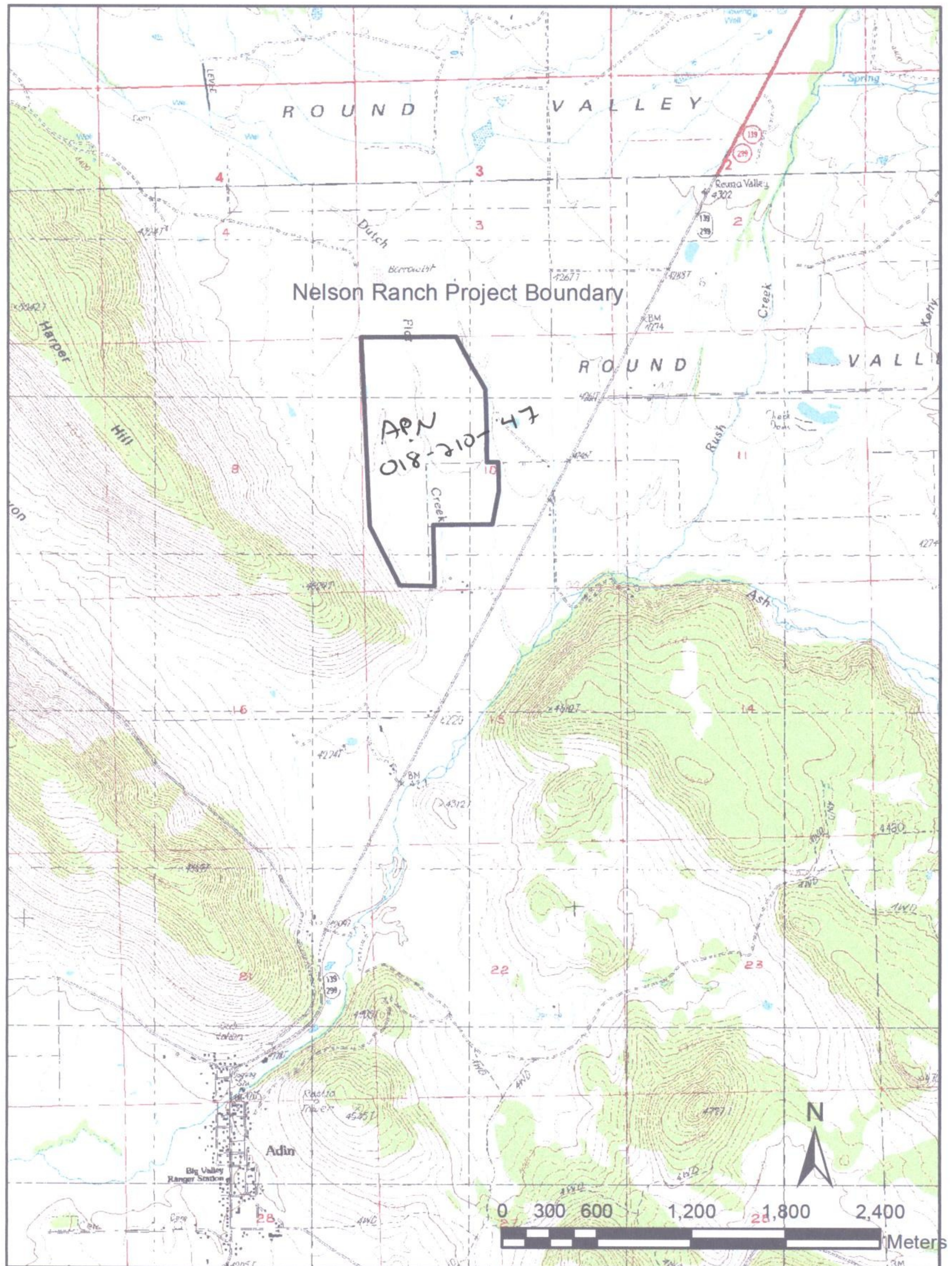


Figure 2. Project Vicinity

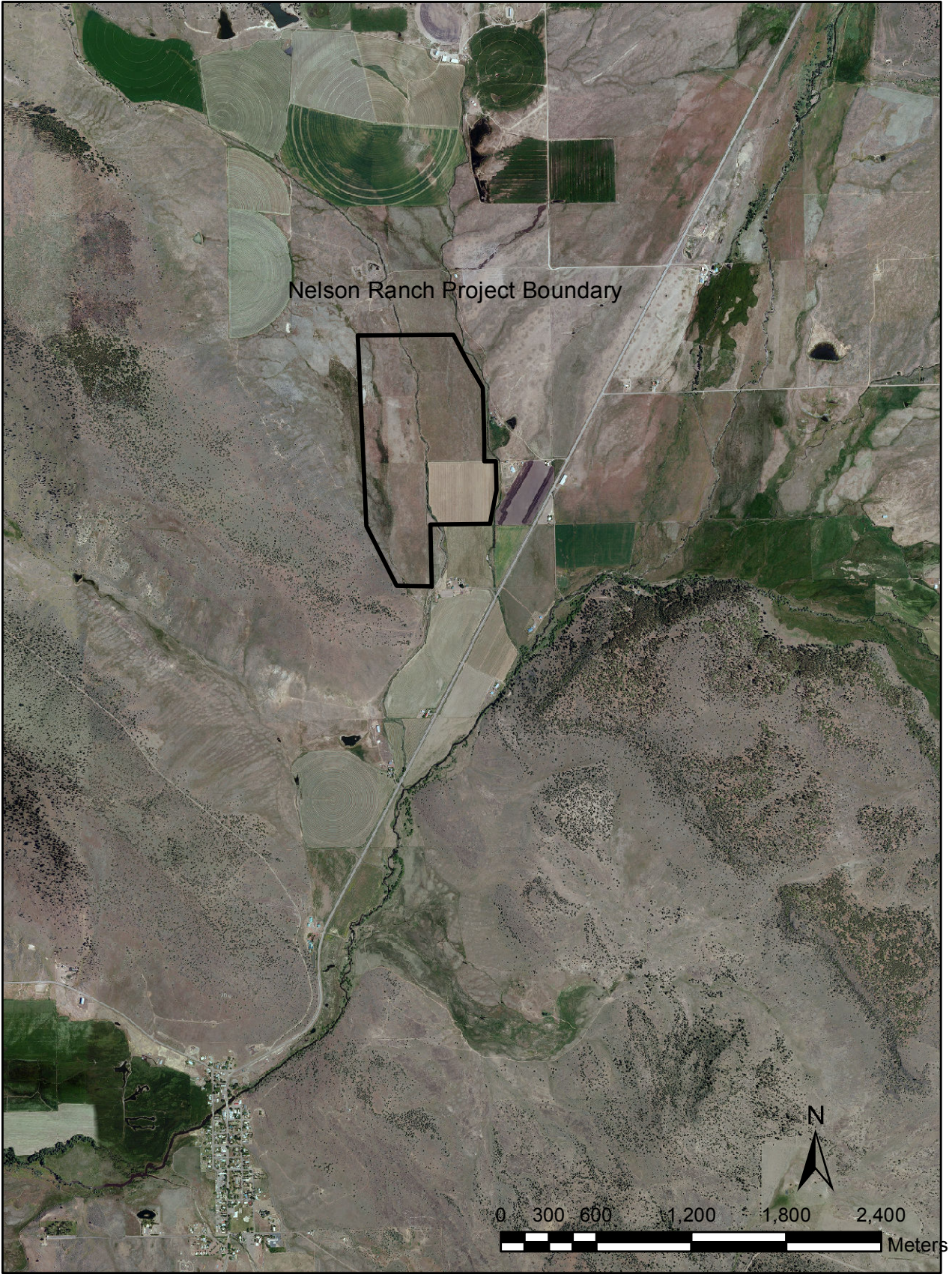
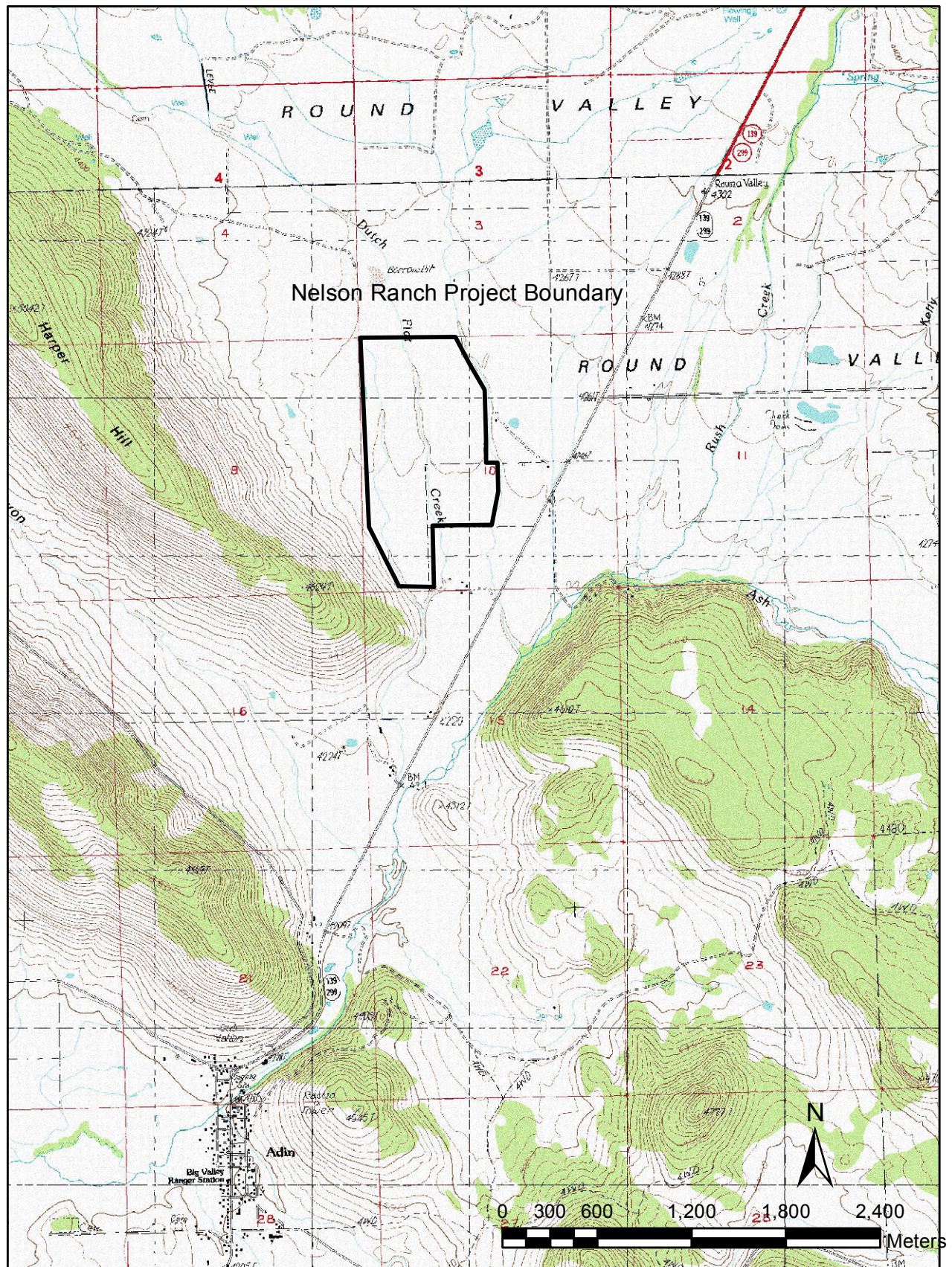


Figure 1a. Project Vicinity



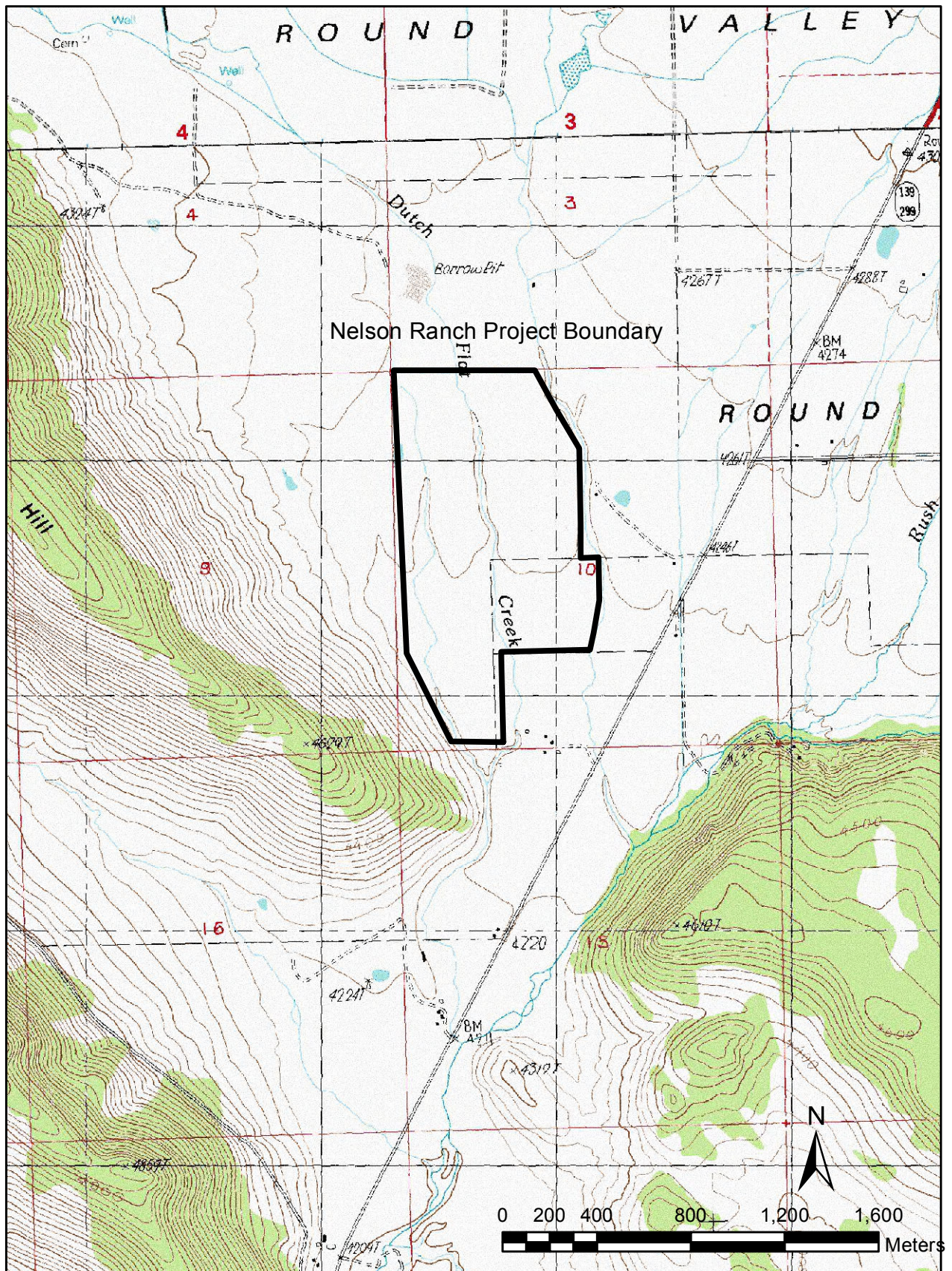


Preservation of Ranch and Ag Lands

UPLOAD UNAVAILABLE OR INVALID

M:\2012-13 workroom\App Intake

Figure 3. Topographic Map





Dutch Flat Creek near center of project area during July 2012. Water in the creek is from upstream subsurface flow from irrigated cropland.



Streambanks along the creek are relatively steep and eroding. They will be recontoured at slopes ranging from 2:1 and 3:1.



Vertical banks such as the one above on Dutch Flat Creek (downstream landowner) were resloped in 2007 and cross vanes were installed to stabilize the creek and create a road crossing.



An example of a cross vane installed in 2008 along DFC. Photo from fall 2011.



Same cross vane as above photo that shows road crossing.



Same cross vane as above. Photo in June 2010.



View upstream of the top of a cross vane three years after installation.



View downstream of an arm of a cross vane three years after installation.



View of a cross vane during a fall flow event three years after installation.



Habitat along the lower portion of the project site where one side of the streambank is stable. After project construction, both sides of the streambank will be stable.



RECORDING REQUESTED BY:

ALAN NELSON and
KATHIE NELSON

WHEN RECORDED, MAIL TO
AND MAIL TAX STATEMENTS TO:

Mr. and Mrs. Nelson
box 55
Adin, CA 96006

Modoc County Recorder
Darcy M. Locken, County Recorder
DOC- 2012-0000546-00

Check Number 3339

REQD BY TOM GIFFORD- NELSON

Wednesday, MAR 14, 2012 14:44:12

CCG \$1.00

Ttl Pd \$12.00

Rcpt # 0000092659

SGH/R1/1-2

THIS SPACE FOR RECORDER'S USE ONLY

APN: _____

GRANT DEED TO A REVOCABLE TRUST

The undersigned Grantors declare that this conveyance transfers
Grantors' interest to Grantors' Revocable Trust for ZERO consideration.

This transaction is exempt from the Documentary Transfer Tax pursuant to R & T Code §11930.

ALAN NELSON and KATHIE NELSON, the GRANTORS,

HEREBY GRANT TO

ALAN NELSON and KATHIE NELSON, as co-Trustees of THE NELSON LIVING TRUST, U/A dated
March 11, 2012, the GRANTEE,

All of THAT PROPERTY situated in the County of Modoc, State of California, bounded and described as set forth in
Exhibit "A" (attached hereto and incorporated herein by reference).

SUBJECT TO the Restrictions, Conditions, Covenants, Rights, Rights of Way, and Easements now of record, if any.

The then-acting Trustee has the power and authority to encumber or otherwise to manage and dispose of the hereinabove
described real property; including, but not limited to, the power to convey.

Executed on March 11, 2012, in Modoc County, California.

ALAN NELSON

KATHIE NELSON

STATE OF CALIFORNIA
COUNTY OF MODOC

On March 11, 2012, before me, Andrea Gifford, a Notary Public,
personally appeared ALAN NELSON and KATHIE NELSON, who proved to me on the basis of satisfactory evidence to
be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same
in their authorized capacity, and that by their signatures on the instrument the persons, or the entities upon behalf of which
the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and
correct.

WITNESS my hand and official seal.

[SEAL]

Signature of Notary Public

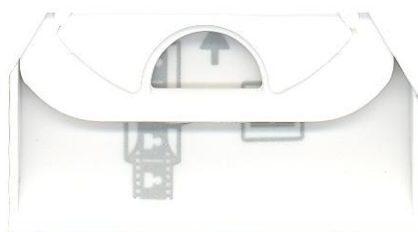
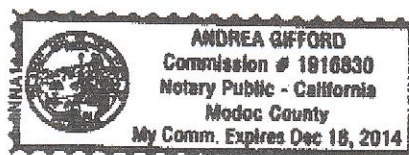


Exhibit "B"

The land referred to herein is situated in the State of California, County of Modoc, and is described as follows:

Resulting Parcel One

Township 39 North, Range 9 East, M. D. B. & M.

Section 9: E 1/2 of NW 1/4, NE 1/4, and N 1/2 of SE 1/4.

Section 10: NW 1/4, W 1/2 of SW 1/4, W 1/2 of NE 1/4 and that portion of the E 1/2 of NE 1/4 lying Westerly of State Highway #299.

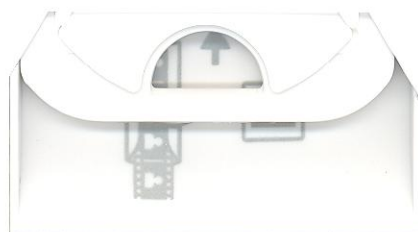
Section 11: That portion of the NW 1/4 of NW 1/4 lying Westerly of State Highway #299.

Said parcel contains 701.45 acres, more or less.

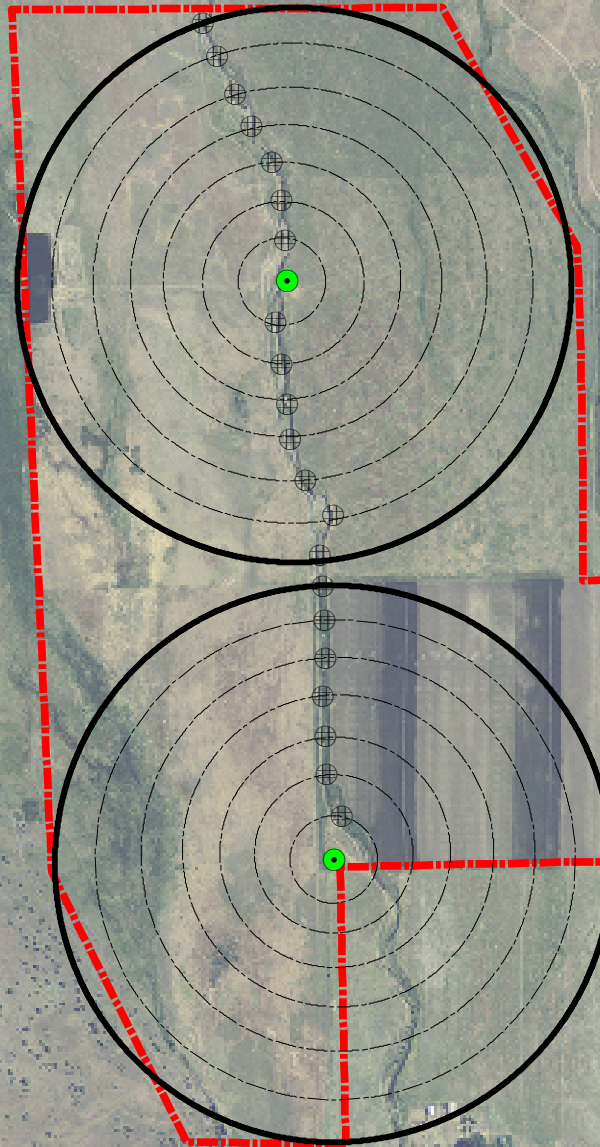
Parcel #

018-210-47

018-200-21



Ash Creek - Nelson Property Stream Stabilization Project October 15, 2012



STREAMWISE

Stream assessment and restoration

*Achieving restoration goals with natural
stream form, processes and function.*

Rick Poore

600 S. Mt. Shasta Blvd.
Mt. Shasta, CA 96067
(530) 941-6334
streamwise@sbcglobal.net
www.streamwise.com

Legend

point features

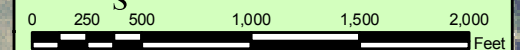
Comment

⊕ wheel crossing

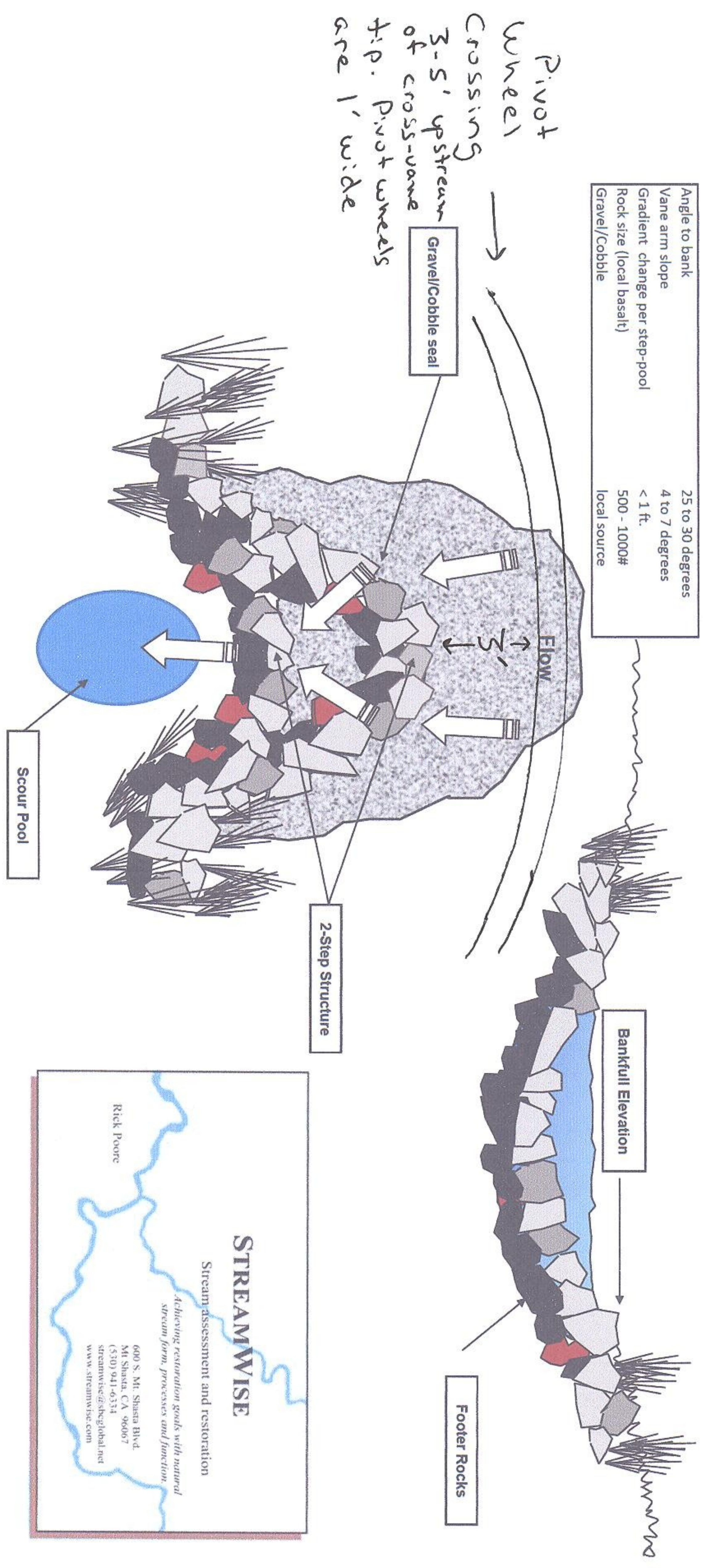
● pivot point

line features

▬ property boundary



Typical Rock Cross-Vane Design Diagram

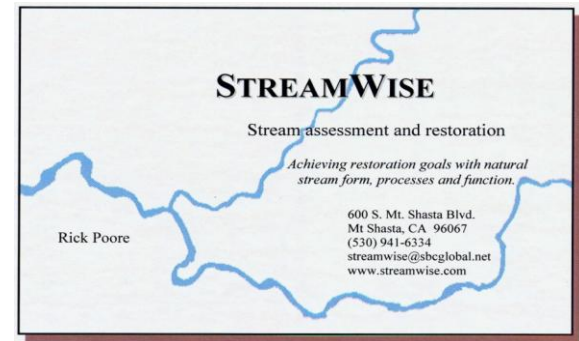
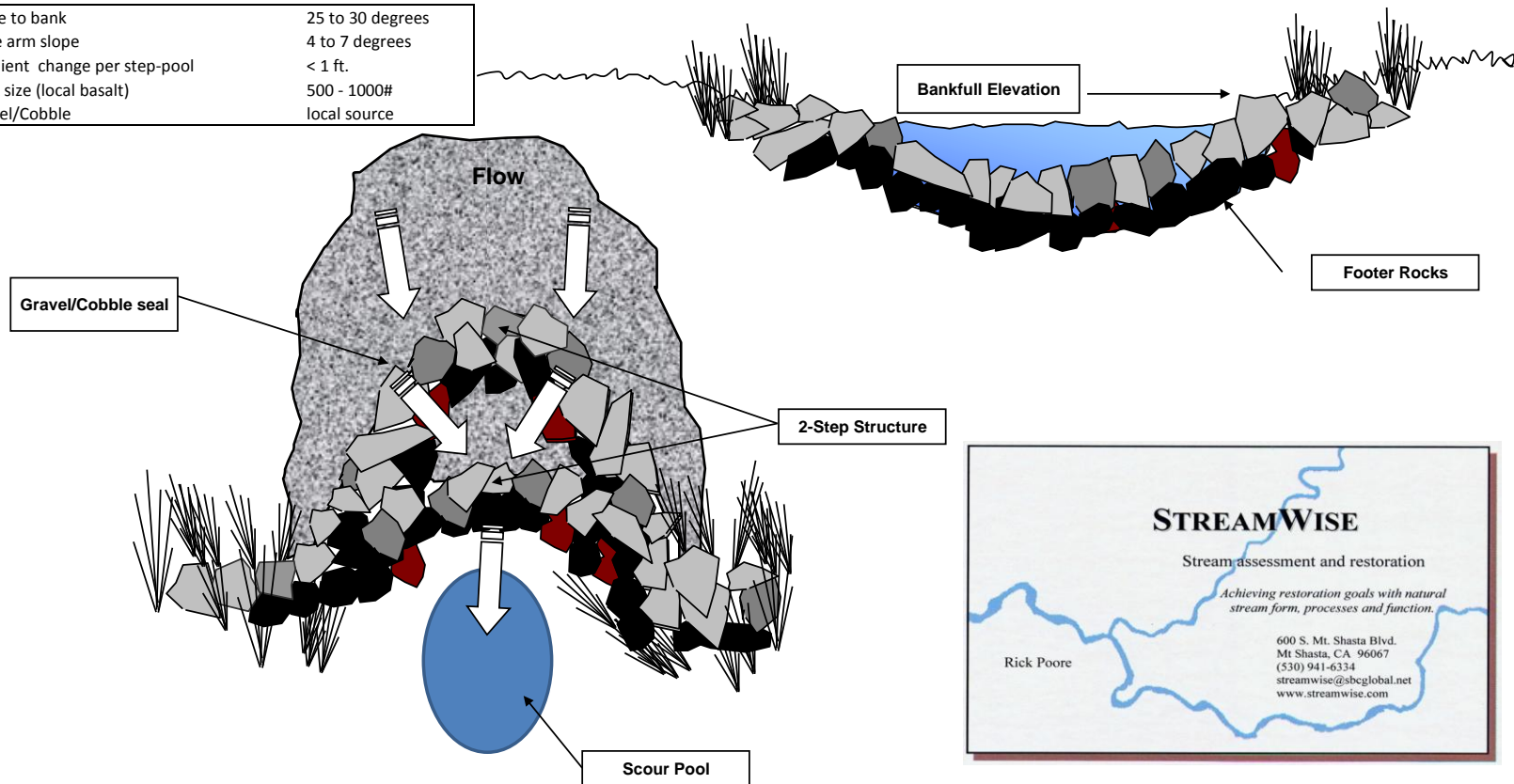


6h. Additional Submission Requirements for site Improvement Projects

See attached land tenure documentation, site plan map, and agreement.

Typical Rock Cross-Vane Design Diagram

Angle to bank	25 to 30 degrees
Vane arm slope	4 to 7 degrees
Gradient change per step-pool	< 1 ft.
Rock size (local basalt)	500 - 1000#
Gravel/Cobble	local source



COPY

NOTICE OF CEQA EXEMPTION

FILED
SEP 10 2012

DARCY M. LOCKEN COUNTY CLERK

BY

DEPUTY

To: Modoc County Clerk
Darcy Locken
204 South Court St.
Alturas, CA 96101
530-233-6205

From: Pit Resource
Conservation District
P.O. Box 301
Bieber, CA 96009

Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044

Project Title:

Dutch Flat Creek Enhancement and Nelson Ranch Improvement Project

Project Location:

Township 39N, R9E, Sec.10

Project Description:

The Pit Resource Conservation District (PRCD), acting as Lead Agency, will use contractors to perform creek enhancement work along Dutch Flat Creek, Modoc County. The project will consist of re-sloping stream banks, building cross-vanes, and planting vegetation to stabilize eroding stream banks. The cross vanes will be constructed to allow a pivot system to cross a creek which has become severely entrenched. Dutch Flat Creek is intermittent and becomes dry during the summer months. The stream-bank enhancement work will allow flood flows to spread out more evenly within the channel which will re-hydrate the site and gradually re-establish the meadow conditions within the inset floodplain. The Natural Resource Conservation Service and the Pit Resource Conservation District will monitor the project. This type of project has been completed and been successful in a number of similar project sites in northern California, including a recent similar project sponsored by the Pit RCD.

Exempt Status (Guidelines Section and Class): Categorical Exemption: Section 15333, Class 33 (d) (1-3, 5) Small Habitat Restoration Project not to exceed five acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife that may include, but are not limited to stream or river bank stabilization with native vegetation or other bioengineering techniques, the primary purpose of which is to reduce or eliminate erosion and sedimentation.

Reasons Why Project is Exempt: The project proposes to implement streambank enhancement techniques along the currently incised stream channel that is heavily eroded. The technique will result in multiple benefits, including reduced sediment, improved groundwater recharge, improved meadow vegetation



conditions, improved riparian vegetation conditions, and improved aquatic resources. The project would affect less than five acres of existing channel and would reduce sediment discharge to Ash Creek and the Pit River, the recipient of Dutch Flat Creek water. There will be no significant adverse impacts on endangered, rare, or threatened species or their habitats. There are no hazardous materials at or around the project site. The project will avoid all archeological resource sites. The project will not result in cumulatively significant impacts. The Project will have no significant adverse effect on the environment.

Public Agencies Involved with the Project:

U.S. Army Corps of Engineers
Central Valley Regional Water Quality Control Board
CA Department of Fish and Game
Natural Resources Conservation Service

Lead Agency Contact Person:

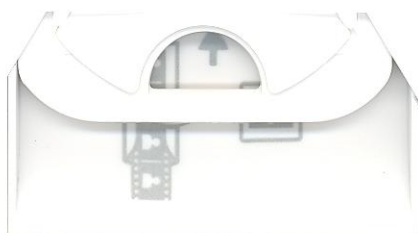
Sharmie Stevenson
Pit Resource Conservation District
(530) 299-3405

Signature: _____

Sharmie Stevenson

Date: _____

8/23/12



EXECUTIVE SUMMARY

Overlin Biological Consulting (OBC) conducted plant and animal surveys during September 1, 2012 to determine the presence of threatened, endangered, or other sensitive species within the proposed Dutch Flat Creek Improvement Project.

Pre-field activities included review of results of previous TES surveys in the project vicinity, records of the occurrence of TES and other species of interest maintained by the California Department of Fish and Game (CDFG), the California Native Plant Society, and the California Natural Diversity Database. No special status species were observed during the conducted surveys.

INTRODUCTION

This report includes a biological inventory, impact analysis, and summary of Best Management Practices (BMP's) for Dutch Flat Creek Enhancement Project. The project area is located on private land northeast of Adin, CA, Modoc County, and within the Adin USGS 7.5' Topographic Quadrangle (41120B8).

This report also includes a description of plant and animal communities and a list of all species found on site, as well as a discussion of special status species and communities that could potentially occur. Although the project area is situated within the range of State and Federal-Endangered Species (*Orcuttia tenuis*, and *Gratiola heterosepala*, CNPS List-1B), it was determined there is low potential for these species to be affected by direct and indirect project impacts. The report discusses potential impacts to biological resources and habitats from the proposed development and suggests BMP's to help minimize or avoid detrimental effects. This study was conducted in compliance with the National Environmental Policy Act (NEPA), the State and Federal Endangered Species Act, and other applicable local, state, and federal guidelines for the protection of natural resources.

The proposed Dutch Flat Creek Enhancement Project is intended to restore the function of the Dutch Flat Creek and stabilize streambanks within an inset floodplain where wetlands have been historically degraded (dewatered) by severe downcutting and lateral erosion. The principal technique planned for the enhancement is the installation of cross-vanes and resloping of the streambanks. This involves excavation of earth from vertical cutbanks and redistributing this material in lower elevations areas; and building cross vane structures at regular elevation intervals to control the stream gradient.

METHODS

Prior to conducting field surveys, Overlin Botanical Consulting (OBC) and Todd Sloat Biological Consulting (Sloat Consulting) compiled a list of special status species known from the vicinity of the project site (Table 1). Species lists reviewed in preparation for field surveys included the California Department of Fish and Game Natural Diversity Database (CNDDB; CDFG 2012) and the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2012) for special-status plant species from the Adin, and surrounding eight, USGS 7.5' Topographic Quadrangles (Halls Canyon, Adin Pass, Hermit Butte, Big Swamp, Ambrose Valley, Hog Valley, Letterbox Hill, and Lane Reservoir). In addition, the Calflora database for Modoc and Lassen counties was queried for special-status species potentially recorded from the vicinity that might not be included in the CNDDB. This list of species was then used to focus the biological field investigations on the targeted species and their known habitats.

The description of biological resources in the project area is based on field surveys conducted by botanist, Annie Overlin and Biologist Todd Sloat in September, 2012. Additional terrestrial biological surveys were conducted on June 10, 2011, July 13, 2012, and September 24, 2012. The field effort included a comprehensive pedestrian survey of the entire area focusing on sensitive plants and animals in the wetland areas. Field surveys were not focused in the upland areas, since most direct disturbances and indirect influences will not occur in these upland sites.

Species that could be identified during the survey are listed in Appendix A. During the biological survey, plant communities were noted, and classified based on Holland (1986) and on the CNPS Manual of California Vegetation Classification system (Sawyer and Keeler-Wolf, 1995).

Definitions - Special-Status Species

Special-status species are animals legally protected under state and federal ESAs or other regulations, and species considered sufficiently rare by the scientific community to qualify for such listing. Special-status animals are species in the following categories:

- animals and plants listed or proposed for listing as threatened or endangered under the federal ESA (50 Code of Federal Regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR][proposed species]);
- animals and plants that are candidates for possible future listing as threatened or endangered under the federal ESA (61 FR 40, February 28, 1996);
- animals and plants listed or proposed for listing by the State of California as threatened or endangered under the California ESA (14 California Code of Regulations [CCR] 670.5);
- animal and plant species of special concern to DFG (Remsen 1978 [birds], Williams 1986 [mammals], Jennings and Hayes 1994 [reptiles and amphibians], Moyle et al. 1989 [fish]);
- animals and plants fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
- animals protected under the Migratory Bird Treaty Act or California Fish and Game Code, Sections 3503.5.
- plants listed as sensitive in the California Native Plant Society Database Inventory of Rare and Endangered Plants of California (2007)

SETTING and RESULTS

The Dutch Flat Creek Restoration Project proposes to restore the functions of 1284 meters of the creek and raise the water table in portions of the meadow that have been dewatered by down-cutting and lateral erosion. The creek originates 8 miles to the northwest of the project area among high-elevation, spring-fed streams of Modoc National Forest. Soon after the restoration area, it drains into the westward-flowing Ash Creek, a significant tributary of the Pit River. While Dutch Flat Creek appears well-established, many years of previous agricultural

land practices have altered the wetland stream system, resulting in a channelized creek bed and drier associated wetlands. These effects are evidenced by remnant channels and isolated pockets of riparian systems.

The proposed project site is a complex mosaic of upland and wetland ecosystems. The upland lands adjacent to the creek consist of native/naturalized pasture. Plant communities on the Dutch Flat Creek project site include non-native grassland, Modoc-Great Basin Riparian Scrub, Transmontane Alkali Marsh, Transmontane Freshwater Marsh, and Alkali Meadow (Figure 1). The characteristic plants and animals of these communities and of Dutch Flat Creek are described below. Appendix B includes a complete species list providing supplemental information describing biological resources on the Project site.

Non-Native Grassland

Non-native grassland dominates the upland streambanks of the project area that has been disturbed either by mechanical means or dewatering and is characterized by ruderal, non-native annual species. This habitat has likely increased in acreage replacing wetland systems including Transmontane alkali and fresh water marshes and alkali meadows. The non-native grassland habitat type is a dense to sparse cover of annual grasses often associated with numerous species of showy-flowered, native annual forbs (“wildflowers”), especially in years of favorable rainfall. Common grass species associated with this site include rip-gut brome (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), and bulbous bluegrass (*Poa bulbosa*). Herbaceous species include red stemmed filaree (*Erodium cicutarium*), sticky chickweed (*Cerastium cicutarium*), Spanish lotus (*Acmispon americanus*), winter vetch (*Vicia villosa*), and long-stalked clover (*Trifolium longipes*). Several noxious weeds were observed within the annual grasslands and have probably increased due to grazing impacts and dewatering of the wet meadows. It is likely that once the water table has returned to Project site, weedy populations will decrease. Weedy species include bull thistle (*Cirsium vulgare*), diffuse knapweed (*Centaurea diffusa*), and field bindweed (*Convolvulus arvensis*). Grasslands on the Project site have been historically altered but provide forage and nesting for several species including ground squirrels, pocket gophers, and mice. These species provide forage for larger predators including red-tailed and Cooper’s hawks and the western rattlesnake.

Modoc-Great Basin Riparian Scrub

Modoc-Great Basin Riparian Scrub was observed in isolated pockets along the stream channel. This habitat was likely more extensive along Dutch Flat Creek and its associated floodplain prior to land use practices that altered the water table. In the Project area, this winter-deciduous riparian forest is dominated by sandbar willow (*Salix exigua*), and arroyo willow (*Salix lasiolepis*). Understory species include herbaceous, graminoid, and shrub species including stinging nettle (*Urtica dioica*), mugwort (*Artemisia douglasiana*), silver sagebrush (*Artemisia cana*), and Woods’ rose (*Rosa woodsii*).

Transmontane Freshwater Marsh and Transmontane Alkali Marsh

Transmontane Freshwater and Transmontane Alkali marsh was observed throughout Dutch Flat Creek and in isolated pockets of remnant channels. These habitats often integrate but Transmontane Freshwater Marsh supports species indicative of a more consistent freshwater input. Both habitat types are tolerant of cold temperatures in winter often well below freezing. Species observed in the Transmontane Freshwater Marsh include a majority of obligate (OBL) and facultative wet (FACW) species such as hardstem bulrush (*Schoenoplectus acutus*), cattail (*Typha latifolia*), creeping spike rush (*Eleocharis macrostachya*), and hairy waterclover (*Marsilea vestita* ssp. *vestita*). As site conditions become drier (often upslope), species indicative of Transmontane Alkali Marsh emerge. Species include Baltic rush (*Juncus balticus*), Nebraska sedge (*Carex nebrascensis*), northern water plantain (*Alisma plantago-aquatica*), and woolly sedge (*C. lanuginosa*).

Alkali Meadow

Alkali Meadow was observed throughout the Project area integrating with wetter marsh systems and non-native annual grasslands. This habitat is associated with terraces of the Dutch Flat Creek floodplain. This complex area hosts a large diversity of perennial grasses, sedges, and forbs. In addition, meadows associated with private agricultural lands often support a high diversity of agricultural species. Grass species observed during the survey included reed-canary grass (*Phalaris arundinacea*), red top (*Agrostis stolonifera*), meadow barley (*Hordeum brachyantherum*), orchard grass (*Dactylis glomerata*), jungle rice (*Echinochloa colona*), scratchgrass (*Muhlenbergia asperifolia*), and Kentucky bluegrass (*Poa pratensis* ssp. *pratensis*). Common sedges and rushes included field sedge (*Carex praegracilis*), wide fruit sedge (*C. angustata*), and Baltic rush (*Juncus balticus*). Forb species included long-stalked clover (*Trifolium longipes*), fringed willow herb (*Epilobium ciliatum* ssp. *ciliatum*), and black medick (*Medicago lupulina*).

Special Status Plant Species

A number of special status species that are of concern to the California Department of Fish and Game and the California Native Plant Society (CDFG, CNDDDB, CNPS 2012) have been recorded in the near vicinity to the Project area. In addition, suitable habitat is present for several of the species listed below, particularly those associated with Transmontane Alkali and Freshwater Marsh. Species analyzed in the pre-field review are presented in the tables below. Status, geographical range, habitat, and flowering periods are given in Table 1; name, status, distribution, habitats, and potential to occur for fish and wildlife in Table 2. A list of all species encountered is provided in Appendix A.

Table 1. Special-Status Vascular Plants with Potential to Occur at Dutch Flat Creek, Modoc County, California.

Common Name <i>Scientific Name</i>	Status (CNPS)	Geographic Range (CA counties; States)	CNPS Habitats† (Elevation)	Flowering period
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Lemmon's milkvetch <i>Astragalus lemmonii</i>	1B.2	Lassen, Modoc, Mono, Plumas, Sierra, Shasta; Nevada and Oregon	GBScr, Meadows, MshSw (Lake shore) (1007-2200 m)	May-Aug
Long-haired star tulip <i>Calochortus longebarbatus</i> var. <i>longebarbatus</i>	1B.2	Lassen, Modoc, Shasta, Siskiyou; Oregon and Washington	GBScr, LCFrs (openings and drainages), Medws, VnPls/clay, mesic (1200-1900 m)	Jun-Aug
Bristly sedge <i>Carex comosa</i>	2.1	Contra Costa, Lake, Mendocino, Sacramento, San Bernardino, Santa Cruz, San Francisco, Shasta, San Joaquin, Sonoma, Idaho, Oregon, Washington	Coastal prairie, Marshes and swamps (MshSw) (lake margins), Valley and foothill grassland (VFGrs)	May-Sept
Sheldon's sedge <i>Carex sheldonii</i>	2.2	Lassen, Modoc, Placer, Plumas; Idaho, Oregon, Utah and elsewhere	LCFrs (mesic), MshSw (freshwater), RpScr (1200-2012 m)	May-Aug
Castlegar hawthorne <i>Crataegus castlegarensis</i>	3	Shasta, Modoc; Oregon, Washington, Idaho, Utah, Wyoming and Canada	RpScr, moist rocky loam (0-975 m)	May-Jun
Great Basin downingia ¹ <i>Downingia laeta</i>	2.2	Lassen, Modoc, Siskiyou; Idaho, Nevada, Oregon, Utah, Wyoming, and elsewhere	GBScr (mesic), Medws, MshSw (shallow freshwater), PJWld/ mesic, VnPls (1220-2200 m)	May-Jul
Aleppo avens <i>Geum aleppicum</i>	2.2	Lassen, Modoc, Siskiyou; Oregon and elsewhere	GBScr, LCFrs, Medws (450-1500 m)	Jun-Aug
Boggs Lake hedge hyssop ¹ <i>Gratiola heterosepala</i>	1B.2 SE	Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, Tehama; Oregon	MshSw (lake margin), VnPls/clay (10-2375 m)	Apr-Aug
Tufted loosestrife <i>Lysimachia thyrsiflora</i>	2.3	Calaveras, Plumas, Shasta, Colorado, Oregon, Utah, Washington, Wyoming	Meadows and seeps (Medws), mesic marshes and swamps (MshSw) Upper montane coniferous forest (UCFrs)	May-Aug
Egg Lake monkeyflower <i>Mimulus pygmaeus</i>	4.2	Lassen, Modoc, Plumas, Shasta, Siskiyou; Oregon	GBScr, LCFrs, Medws, PJWld/ mesic, streamsides, volcanic, clay (500-1840m)	May-Aug
Slender orcutt grass ¹ <i>Orcuttia tenuis</i>	1B.1 SE,FE	Lake Lassen, Plumas, Sacramento, Shasta, Siskiyou and Tehama	VnPls (35-1760 m)	May-Sep (Oct)

Profuse-flowered pogogyne <i>Pogogyne floribunda</i>	1B.2	Lassen, Modoc, Shasta, Siskiyou; Oregon	VnPls (945-1745 m)	May-Sept
Modoc County knotweed <i>Polygonum polygaloides</i> ssp. <i>esotericum</i>	1B.1	Lassen, Modoc, Plumas, Shasta , Sierra	Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools (VnPls)/mesic	May-Sept
Marsh skullcap ¹ <i>Scutellaria galericulata</i>	2.2	Modoc, Nevada, Plumas, Shasta, San Joaquin, Siskiyou; Oregon and elsewhere	LCFrS, Medws, MshSw (0-2100 m)	Jun-Sep
Hairy marsh hedge-nettle <i>Stachys pilosa</i>	2.3	Modoc, Shasta, Siskiyou; Arizona, Nevada, New Mexico, Oregon, Utah, Washington and elsewhere	GBSrc (mesic), Medws, (1200-1770 m)	Jun-Aug
Long-leaved starwort ¹ <i>Stellaria longifolia</i>	2.2	Butte , Calaveras, Plumas, Shasta , Arizona , New Mexico, Oregon, Washington, and elsewhere	Bogs and fens (BgFns), Meadows and seeps, Riparian woodland, Upper montane coniferous forest	May-Aug
Howell's thelypodium ¹ <i>Thelypodium howellii</i> ssp. <i>howellii</i>	1B.2	Lassen, Modoc, Shasta; Oregon and Washington	GBScr, Medws (alkaline) (1200-1830 m)	May-Jun

1 Plant species documented in the CNDDDB from immediate vicinity

List **1B** = Rare, Threatened, or Endangered in CA and elsewhere

List **2** = Rare, Threatened or Endangered in CA but more common elsewhere.

List **4** = Limited Distribution in CA

Threat ranks: **0.1** = high; **0.2** = moderate; **0.3** = low

† **Plant Community Association Codes:** **BgFns** = Bogs and Fens; **BUFrS** = Broadleafed Upland Forest; **Chprl** = Chaparral; **GBScr** = Great Basin Scrub; **LCFrS** = Lower Montane Coniferous Forest; **Medws** = Meadows and Seeps; **MshSw** = Marshes and Swamps; **PJWld** = Pinyon Juniper Woodland; **UCFrS** = Upper Montane Coniferous Forest; **VnPl** = Vernal Pools

Table 2 SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR ON THE DUTCH FLAT CREEK PROJECT AREA				
Common and Scientific Name	Status ^a Federal/State	California Distribution	Habitats	Presence on Project site; Potential to Occur on the Project Site
INVERTEBRATES				
CA Floater (freshwater mussel) <i>Anodonta californiensis</i>	FSS/---	Historically found throughout most of California except for north coast and Central Valley. Do occur in Pit River drainage below the confluence of Fall River.	Shallow muddy or sandy habitat in large rivers, reservoirs, and lakes	Not known to occur. Low potential as habitat is not suitable
Topaz Juga (snail) <i>Juga acutifilosa</i>	FSS/---	Northeastern California, Modoc County, Lassen, and Shasta County;	Cold spring systems with rocky bottom substrate	Not known to occur. Low potential as habitat on-site is not suitable
REPTILES & AMPHIBIANS				
Northern Leopard Frog <i>Rana pipiens</i>	FSS/SSC	Native populations historically occurred in Modoc, Lassen, and Inyo Counties; Introduced and native populations also known to occur in El Dorado Counties in the Lake Tahoe Basin.	Highly aquatic, occur in or near quiet, permanent and semi-permanent water in many habitats.	Not known to occur. Low potential; species has been largely extirpated from the region; Habitat onsite appears to fit descriptions reported for their historic occurrences
Northwestern Pond Turtle <i>Clemmys marmorata marmorata</i>	FSS/SSC	In California, range extends from Oregon border of Del Norte and Siskiyou Counties south along coast to San Francisco Bay, inland through Sacramento Valley, and on the western slope of Sierra Nevada; range overlaps with that of southwestern pond turtle through the Delta and Central Valley to Tulare County	Associated with permanent ponds, lakes, streams, and irrigation ditches or permanent pools along intermittent streams.	Not known to occur and was not observed during surveys. Dutch Flat Creek becomes dry during most summers.
Oregon Spotted frog <i>Rana pretiosa</i>	FSS,C/SSC	Historic distribution occurred in Modoc, Siskiyou, and northeastern Shasta County. Current distribution only known to occur in Modoc County in the Warner Mountains.	Along marshy edges of ponds or lakes, or in algae grown overflow streams or pools, elevation range from 1000 m to 1450 m	Not known to occur. Low potential; species is not known to occur in Lassen or Shasta County.
FISH				
Hardhead <i>Mylopharodon conocephalus</i>	FSS/SSC	Widely distributed in low to mid elevation streams in the Sacramento and San Joaquin drainage.	Well-oxygenated areas of larger mid to low elevation streams with clear, deep, slow water pools and sand-gravel-boulder substrates.	Not known to occur. Low potential; site does not support suitable habitat.
Modoc Sucker <i>Catostomus microps</i>	E/E,FP	Modoc County	Pools in small upper tributary streams of low to medium gradient reaches	Known to occur. Species is known from reaches higher in the watershed. USFS has determined that similar immediately downstream of project site is “not likely to adversely affect” the species.
MAMMALS				

American Marten <i>Martes americana</i>	FSS,MIS/---	Coastal mountains from Del Norte County to Sonoma Counties, through Cascades to Lassen County; south in Sierra Nevada to Kern County.	Intermediate to mature coniferous forests as well as dense riparian habitats; Mixed evergreen forests with >40% canopy closure and large trees and snags.	Not known to occur; Low potential, affected area is not suitable and adjacent forest structure is considered too far away and of low quality for species.
California Wolverine <i>Gulo gulo luteus</i>	FSS/T,FP	Klamath and Cascade Ranges south through the Sierra Nevada to Tulare County	Sighted in a variety of habitats from 1,600 to 14,200 feet; most common in open terrain above timberline and subalpine forests	Not known to occur. Low potential; species occurrences have only recently been reported in the Tahoe area of the Sierras.
Pacific Fisher <i>Martes pennanti</i>	FSS,C/SSC,C	Coastal mountains from Del Norte County to Sonoma Counties, through Cascades to Lassen County; south in Sierra Nevada to Kern County	Mixed conifer habitats with high overstory cover; preference for riparian areas and other ecotonal habitats	Not known to occur. Low potential; affected area is not suitable and adjacent forest structure is too far away and considered of low quality for species
Pallid Bat <i>Antrozous pallidus</i>	FSS/SSC	Low elevations throughout California	Forage in oak woodlands, roost in mines, snags, and in crevices in oaks	Not known to occur. Low potential; no suitable habitat within impacted area; species may forage over the adjacent habitats are considered low quality for species
Sierra Nevada Red Fox <i>Vulpes vulpes necator</i>	FSS/T	Cascade Range east to the Sierra Nevada then south to Tulare County	Red fir and lodgepole pine forests, generally from 5,000 to 8,400 feet, associated with mountain meadows ; Alpine shrub, wet meadow, mixed conifer, aspen, montane chaparral, and montane riparian habitats.	Not known to occur. Low potential; habitat on-site and in region is generally to xeric for this species; no suitable burrow of denning habitat was found during surveys
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	FSS/SSC	Klamath Mountains, Cascades, Sierra Nevada, Central Valley, Transverse and Peninsular Ranges, Great Basin, and the Mojave and Sonora Deserts	Mesic habitats; gleans insects from brush or trees and feeds along habitat edges. Throughout California in all but alpine and sub-alpine habitats.	Not known to occur. Moderate potential; habitat on-site and in region is generally to xeric for this species
BIRDS				
American Peregrine Falcon <i>Falco peregrinus anatum</i>	FSS/E,FP	Permanent resident on the north and south Coast Ranges; may summer on the Cascade and Klamath Ranges south through the Sierra Nevada to Madera County; winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Range	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large populations of other bird species	Not known to occur. Low potential; suitable habitat is present and species may occasionally be found foraging on the site during migration; no suitable nesting habitat present on-site or immediately adjacent to the site

Bald Eagle <i>Haliaeetus leucocephalus</i>	---/E,FP	Nests in Siskiyou, Modoc, Trinity, Shasta, Lassen, Plumas, Butte, Tehama, Lake, and Mendocino Counties and in the Lake Tahoe Basin; reintroduced into central coast; winter range includes the rest of California, except the southeastern deserts, very high altitudes in the Sierras, and east of the Sierra Nevada south of Mono County; range expanding	In western North America, nests and roosts in coniferous forests within 1 mile of a lake, a reservoir, a stream, or the ocean	Known to occur during migration and breeding season. Species forages along the Pit River corridor during migration, and is known to nest in the Big Valley area. Occasionally observed flying overhead of project site during migration and the breeding season. No suitable nesting habitat is present on the project site.
California Spotted Owl <i>Strix occidentalis occidentalis</i>	FSS,MIS/SSC	Sierra Nevada from Lassen County south to northern Kern County; occurs in localized areas of the Transverse and Peninsular Ranges of southern California	Mature forest with permanent water and suitable nesting trees and snags; in southern California, nearly always associated with oak and oak-conifer habitats	Not known to occur. No potential as project does not provide suitable habitat
Golden Eagle <i>Aquila chrysaetos</i>	---/FP	Foothills and mountains throughout California; uncommon non-breeding visitor to lowlands such as the Central Valley	Cliffs and escarpments or tall trees for nesting; annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals for prey	Not known to occur. Moderate potential to occur and forage on the site as the species is known to breed in the Big Valley area. The species typically only nests in areas with very little human activity.
Greater Sage-grouse <i>Centrocercus urophasianus</i>	FSS,MIS/SSC	Great Basin lands in eastern California in Modoc, Lassen, and northern Inyo Counties	Dependent on sage-brush (<i>Artemisia tridentata</i>) for food and cover; restricted to flat plains or rolling hills	Not known to occur; low potential; species has been extirpated from the Big Valley area.
Greater Sandhill Crane <i>Grus canadensis tabida</i>	FSS,MIS/T,FP	Breeds on the plains east of the Cascade Range and south to Sierra County; winters in the Central Valley, southern Imperial County, Lake Havasu National Wildlife Refuge, and the Colorado River Indian Reserve	Summers in open terrain near shallow lakes or freshwater marshes; winters in plains and valleys near bodies of fresh water	Not known to occur. Species occasionally forages in agriculture fields adjacent to project area during migration but not during the breeding season.
Northern Goshawk <i>Accipiter gentilis</i>	FSS/SSC	Permanent resident on the Klamath and Cascade Ranges, on the north Coast Ranges from Del Norte County to Mendocino County, and in the Sierra Nevada south to Kern County; winters in Modoc, Lassen, Mono, and northern Inyo Counties; rare in southern California	Nests and roosts in older stands of red fir, Jeffrey pine, Ponderosa pine, and lodgepole pine forests; hunts in forests and in forest clearings and meadows	Not known to occur. Low potential; habitat on project site is not suitable for foraging habitat although the species on occasion may forage nearby or overhead in the forest structure three to four miles north of the project site
Northern Harrier <i>Circus cyaneus</i>	---/SSC	Throughout lowland California; has been recorded in fall at high elevations	Grasslands, meadows, marshes, and seasonal and agricultural wetlands providing tall cover	Not known to occur, Moderate potential; suitable foraging and nesting habitat is present throughout the project site and surrounding area

Northern Spotted Owl <i>Strix occidentalis caurina</i>	T/SSC	A permanent resident throughout its range; found in the north Coast, Klamath, and western Cascade Range from Del Norte County to Marin County; Individuals north of Highway 299 are considered S.o. caurina, while those south are S.o. occidentalis.	Dense old-growth forest “structure” dominated by conifers with topped trees or oaks available for nesting crevices; also occurs in non-old growth forest in coastal regions	Not known to occur. No potential as the project site lacks suitable nesting habitat as does adjacent forests.
Swainson’s Hawk <i>Buteo swainsoni</i>	FSS/T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, Great Basin, and Butte Valley; the state’s highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, grain fields, and vegetable crops	Not known to occur. Moderate potential to occur during the breeding season and migration on the project site; suitable nesting habitat is not present on-site. The nearest nest found adjacent to the project site during surveys was ca. 5.5 miles to the west.
Little Willow flycatcher <i>Empidonax traillii brewsterii</i>	--/E	Summer range includes a narrow strip along the eastern Sierra Nevada from Shasta County to Kern County, another strip along the western Sierra Nevada from El Dorado County to Madera County; widespread in migration	Riparian areas and large, wet meadows with abundant willows for breeding; usually found in riparian habitats during migration	Not known to occur. LOW potential during migration; no suitable nesting habitat on-site as site is generally too xeric. Also, most likely sub-species for this region is E.t. adastus.
Bank swallow <i>Riparia riparia</i>	---/T	The state’s largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County and along the Feather and lower American Rivers and Cache Creek, in the Owens Valley; nesting areas also include the plains east of the Cascade Range south through Lassen County, northern Siskiyou County, and small populations near the coast from San Francisco County to Monterey County	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam to allow digging	Not known to occur; no suitable nesting habitat occurs along Dutch Flat Creek.
Tricolored Blackbird <i>Agelaius tricolor</i>	---/SSC	Largely endemic to California; permanent residents in the Central Valley from Butte County to Kern County; at scattered coastal locations from Marin County south to San Diego County; breeds at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grain fields;	Not known to occur. Moderate potential; suitable foraging habitat is present and species may occasionally be found foraging on the site during migration or the breeding season; no suitable nesting habitat present on-site.
Yellow Warbler <i>Dendroica petechia</i>	MIS/SSC	Nests over all of California except the Mojave Desert region, and high altitudes in the Sierra Nevada; winters along the Colorado River and in parts of Imperial and Riverside Counties; two small permanent populations in San Diego and Santa Barbara Counties	Primarily nests in riparian habitats adjacent to creeks and rivers	Not known to occur. Likely occurs in riparian areas during migration. Limited breeding habitat on-site as riparian areas are less dense compared to areas immediately downstream in Ash Creek corridor.

^a Status definitions:

E=Listed as Endangered under the federal or state Endangered Species Acts
SSC=California species of special concern
FSS=United States Forest Service Sensitive Species
MIS=United States Forest Service Management Indicator Species

T=Listed as Threatened under the federal or state Endangered Species Acts
C = Candidate for listing as Threatened under the federal or state Endangered Species Acts
FP=California fully protected species

IMPACT ASSESSMENT

Table 1 and 2 summarizes the special-status plant wildlife species evaluated for this Project. No special status plant or wildlife species were found during surveys. Three special-status wildlife species - the bald eagle, prairie falcon, and Swainson's hawk have a moderate potential to occur on or adjacent to the project site. Each of these species is common in the region, and will not be affected by project activities as no nesting habitat is nearby and habitat changes will improve conditions for each of them. A description of them and evaluation of project activity impact on them is provided below. No other special-status wildlife species were observed. However, eight other special-status species have a moderate or high potential to occur in the project area. Two species - the Coopers hawk and Ferruginous hawk - would only occur within the project area during migration or brief periods while foraging, and will not be adversely affected by project activities. Suitable foraging habitat is present in the project site for the willow flycatcher, tricolored blackbird and golden eagle, but no suitable nesting habitat is present on-site or immediately adjacent to the project site (i.e. within ½ mile). The project will have no affect on these four species. The Townsend's big-eared bat is not known to occur on-site, but no formal bat surveys were conducted for this species. No suitable nesting habitat is present on-site, although suitable foraging habitat is present. Therefore, project activities will not impact this species. Finally, the Modoc sucker is known to occur within Dutch Flat Creek in the headwaters located approximately 6-8 miles upstream. A previous consultation with the U.S. Fish and Wildlife Service (USFWS) was conducted for a similar project conducted immediately downstream and adjacent to the project site in 2008 and 2009. The USFWS conducted the bank stabilization techniques such as resloping and construction of rock vanes in DFC would not adversely affect the Modoc sucker when construction occurs during the summer and fall time periods when the creek is dry. A list of animal species is provided at the end of this report.

No special-status plants were observed during surveys and no suitable habitat is present for the federally and state listed species (i.e. slender orcut grass or Boggs Lake hedge hyssop). Improvements to Dutch Flat Creek and associated wetlands are expected to provide more ideal conditions for larger wetlands species diversity by raising the water table and eliminating noxious weeds

Prairie falcon. The prairie falcon is known to nest in the region and likely forages on the site during winter. However, no suitable nesting habitat is present on-site or nearby (i.e. within 2 miles), and this species was not observed during the breeding season. Project activities are expected to result in a change in vegetation from grassland and degraded meadow to wet meadow habitat. This vegetation change is not expected to have any direct or indirect impacts on prairie falcon as their foraging habitat is not considered to be a limiting factor affecting this species.

Swainson's Hawk. No Swainson's hawk nests were observed during surveys and no suitable nest trees occur within ½ mile of the project site. The project site provides suitable foraging habitat but is considered of low quality because vegetation in the annual grassland is so sparse that vole populations remain low. The nearest known Swainson's hawk nest was found approximately 5.5 miles to the west in 2011. This nest was also active in 2012 and two young

successfully fledged from the site. There may be Swainson's hawks nesting closer to the project site but they were not found. The project will not directly affect potential Swainson's hawks nests as all suitable nest trees are at least .5 miles away from project activities. The project is expected to improve foraging habitat as the vegetation is expected to change from annual grassland to wet meadow, and wet meadow often supports higher meadow vole populations.

Bald eagle. Bald eagles are regularly observed on and near the project site during migration. Individuals are also occasionally observed during the breeding season in Round Valley (i.e. the valley where the project site is located). The location of the nearest known nesting pair is thought to be located about 10 miles northwest along the Pit River (California Dept. Fish and Game Bald Eagle survey data http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/bald_eagle/97.html). Project activities will not affect this species as it infrequently forages at the project site and as the site does not currently provide suitable breeding habitat.

Nesting Swallows and other Migratory Birds. Migratory birds (e.g. western kingbird, northern rough-winged swallows) are known to nest within or directly adjacent to the project site. These species are protected under the Migratory Bird Treaty Act and California Dept. of Fish and Game Code. Construction activities could potentially affect these species by directly destroying nests, eggs, and/or young during the breeding season (i.e. May through July). At least on northern rough-winged swallow was nesting within the vertical bank along Dutch Flat Creek. In order to minimize and avoid affects to these species, construction activities should be conducted outside of the breeding season, or conducted at a time where impacts would not occur (e.g. immediately prior to nest initiation or once young have fledged from the nest). The dates of nesting vary by species and vary each year depending on local and regional weather patterns, and a qualified biologist should conduct site surveys to determine appropriate construction date times to avoid impacts. In general, construction activities conducted after July 15th avoid impacts to nesting migratory birds in Big Valley.

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Appendix A

Dutch Flat Creek Restoration Project Plant Species List

Scientific Name	Common Name
Forbs	
<i>Achillea millefolium</i>	Yarrow
<i>Acmispon americanus</i>	Spanish lotus
<i>Alisma plantago-aquatica</i>	Northern water plantain
<i>Amaranthus albus</i>	Pigweed amaranth
<i>Artemisia douglasiana</i>	Mugwort
<i>Asclepias speciosa</i>	Showy milkweed
<i>Centaurea diffusa</i>	Diffuse knapweed
<i>Cerastium glomeratum</i>	Sticky chickweed
<i>Chamaesyce serpyllifolia</i>	Thymeleaf sandmat

<i>Cirsium vulgare</i>	Bull thistle
<i>Clarkia gracilis</i> ssp. <i>gracilis</i>	Slender clarkia
<i>Convolvulus arvensis</i>	Field bindweed
<i>Conyza canadensis</i>	Canadian horseweed
<i>Descurainia sophia</i>	Flix weed
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	Fringed willow herb
<i>Epilobium brachycarpum</i>	Panicled willow herb
<i>Epilobium glaberrimum</i>	Fireweed
<i>Epilobium campestre</i>	Smooth- spike primrose
<i>Erodium cicutarium</i>	Red stemmed filaree
<i>Eryngium castrense</i>	Coyote thistle
<i>Gnaphalium palustre</i>	Western marsh cudweed
<i>Grindelia squarrosa</i>	Curlycup gumweed
<i>Helianthus annuus</i>	Common sunflower
<i>Hypericum formosum</i> var. <i>scouleri</i>	Scouler's St. Johnswort
<i>Lactuca serriola</i>	Prickly lettuce
<i>Lupinus arbustus</i>	Longspur lupine
<i>Marsilea vestita</i> ssp. <i>vestita</i>	Hairy waterclover
<i>Medicago lupulina</i>	Black medick
<i>Melilotus officinale</i>	Lemon balm
<i>Mentha arvensis</i>	American wild mint
<i>Mentzelia affinis</i>	Yellow comet
<i>Madia elegans</i> var. <i>elegans</i>	Common madia
<i>Mimulus moschatus</i>	Muskflower

<i>Navarretia intertexta</i> ssp. <i>intertexta</i>	Needle leaved navarretia
<i>Persicaria maculosa</i>	Spotted ladythumb
<i>Plantago lanceolata</i>	English plantain
<i>Polygonum aviculare</i> ssp. <i>depressum</i>	Prostrate knotweed
<i>Potentilla gracilis</i> var. <i>fastigiata</i>	Slender cinquefoil
<i>Rumex salicifolius</i>	Willow dock
<i>Sisymbrium altissimum</i>	Tumblemustard
<i>Sonchus asper</i>	Spiny sowthistle
<i>Symphyotrichum campestre</i>	Western meadow aster
<i>Symphyotrichum eatonii</i>	Eaton's aster
<i>Symphyotrichum lanceolatum</i>	White panicle aster
<i>Taraxacum officinale</i>	Dandelion
<i>Trifolium longipes</i>	Long-stalked clover
<i>Tragopogon dubius</i>	Yellow salsify
<i>Urtica dioica</i>	Stinging nettle
<i>Verbascum thapsus</i>	Woolly mullein
<i>Verbena bracteata</i>	Big bract verbena
<i>Verbena hastata</i>	Swamp verbena
<i>Veronica anagallis-aquatica</i>	Water speedwell
<i>Vicia villosa</i>	Winter vetch
<i>Xanthium strumarium</i>	Cocklebur
Grasses and grasslike species	
<i>Agrostis stolonifera</i>	Red top
<i>Avena fatua</i>	Common wild oats

<i>Alopecurus pratensis</i>	Meadow foxtail
<i>Bromus diandrus</i>	Rip gut brome
<i>Bromus japonicus</i>	Japanese brome
<i>Bromus tectorum</i>	Cheatgrass
<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Slim stem reedgrass
<i>Carex angustata</i>	Wide fruit sedge
<i>Carex lanuginosa</i>	Woolly sedge
<i>Carex nebrascensis</i>	Nebraska sedge
<i>Carex praegracilis</i>	Field sedge
<i>Crypsis schoenoides</i>	Swamp picklegrass
<i>Dactylis glomerata</i>	Orchard grass
<i>Deschampsia danthonioides</i>	Annual hairgrass
<i>Echinochloa colona</i>	Jungle rice
<i>Elymus elymoides</i>	Squirrel tail grass
<i>Eleocharis macrostachya</i>	Creeping spike rush
<i>Elymus trachycaulus</i>	Slender wheatgrass
<i>Eragrostis cilianensis</i>	Stinkgrass
<i>Equisetum laevigatum</i>	Smooth horsetail
<i>Festuca myuros</i>	Rattail sixweeks grass
<i>Festuca perennis</i>	Italian rye grass
<i>Glycerin elata</i>	Fowl mannagrass
<i>Hordeum brachyantherum</i>	Meadow barley
<i>Hordeum marinum</i>	Seaside barley
<i>Juncus balticus</i>	Baltic rush

<i>Juncus effusus</i>	Common bog rush
<i>Juncus ensifolius</i>	Swordleaf rush
<i>Leymus cinereus</i>	Great basin wild rye
<i>Muhlenbergia asperifolia</i>	Scratchgrass
<i>Phalaris arundinaceae</i>	Reed canarygrass
<i>Phleum</i>	Timothy
<i>Poa bulbosa</i>	Bulbous bluegrass
<i>Poa pratensis</i> ssp. <i>pratensis</i>	Kentucky bluegrass
<i>Puccinellia lemmonii</i>	Lemmon's alkali grass
<i>Polypogon monspeliensis</i>	Rabbit foot grass
<i>Schoenoplectus acutus</i>	Hardstem bulrush
<i>Typha latifolia</i>	Cattail
Shrubs and Trees	
<i>Artemisia cana</i> ssp. <i>bolanderi</i>	Bolander silver sagebrush
<i>Ericameria nauseosa</i>	Rabbitbrush
<i>Rosa woodsii</i> var. <i>ultramontana</i>	Interior rose
<i>Salix exigua</i>	Sandbar willow
<i>Salix lasiolepis</i>	Arroyo willow

Appendix B
Site Photos

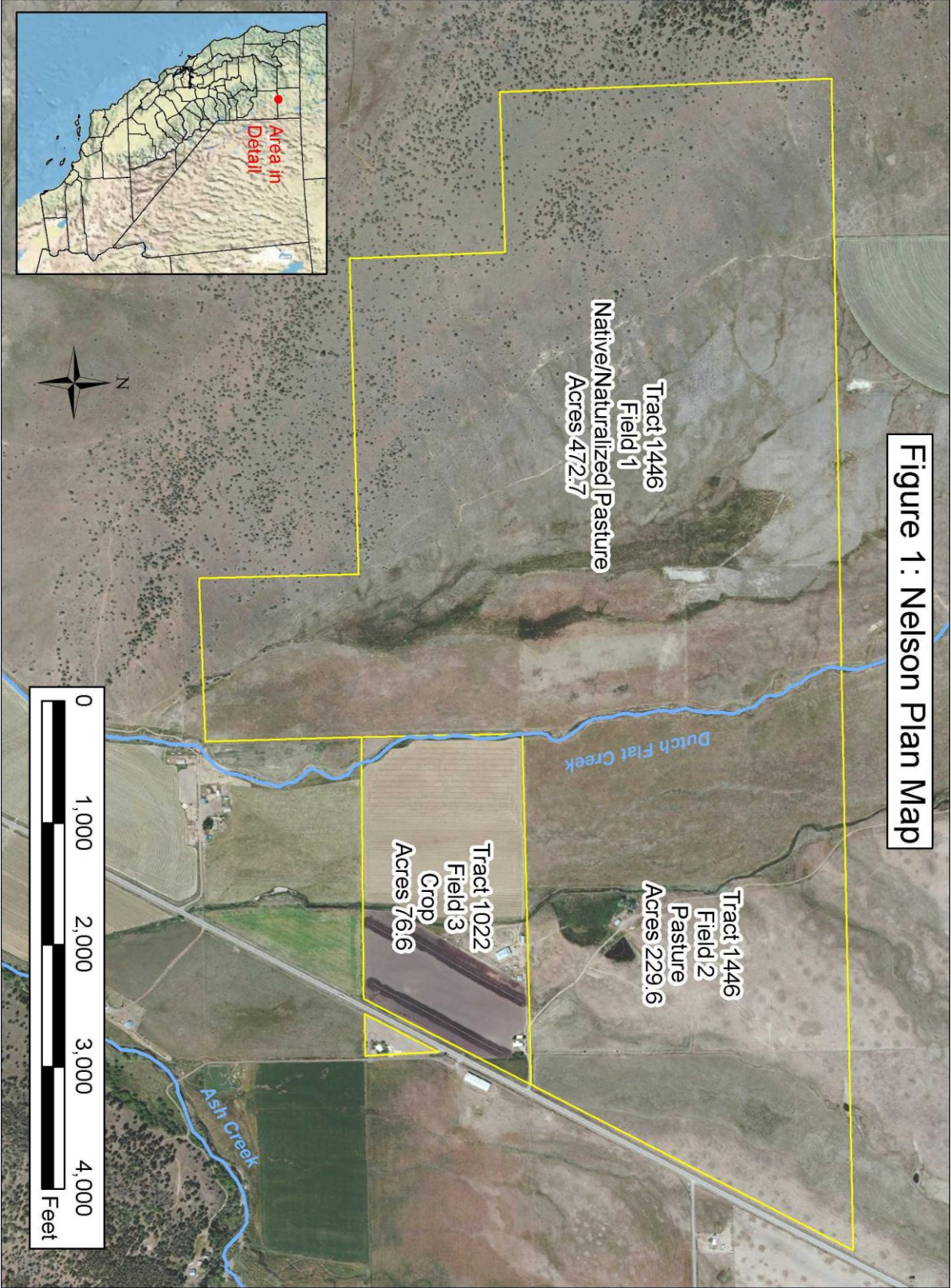


Creek and associated alfalfa field



Degraded channel and eroded banks

Figure 1
Site Map



Todd Sloat

From: Todd Sloat <tsloat@citlink.net>
Sent: Sunday, October 21, 2012 12:58 PM
To: Dale Kroschel (dale.kroschel@ca.usda.gov)
Subject: Dutch Flat Creek and Nelson Ranch Project

Hi Dale, I'm sending you this quick email to document the fact the NRCS has conducted a record search and a pedestrian survey along Dutch Flat Creek within the Nelson Ranch project area. No cultural or historical sites were known to occur or were found during the investigation and portions of the site (terraces adjacent to the creek) have been deep ripped. NRCS has determined the project is exempt.

The Pit RCD appreciates the collaboration/partnership with you on this project – thank you.!

Todd Sloat
Watershed Coordinator
Pit Resource Conservation District
530336-5456



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RESOLUTION 2012-32

**A RESOLUTION APPROVING THE SUBMITTAL OF A GRANT APPLICATION FOR
GRANT FUNDS FOR THE PROPOSITION 84 GRANT PROGRAM UNDER THE
SIERRA NEVADA CONSERVANCY.**

WHEREAS, the Legislature and Governor of the State of California have provided funds for the program shown above; and

WHEREAS, the Sierra Nevada Conservancy (SNC) has been delegated the responsibility for the administration of a portion of these funds through a local assistance grants program, establishing necessary procedures; and

WHEREAS, the Applicant, if selected, will enter into an agreement with the SNC to carry out the project;

WHEREAS, the Pit RCD has identified the Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project as valuable toward meeting its mission and goals.

BE IT HEREBY RESOLVED by the Modoc County Board of Supervisors that they support the application for the Dutch Flat Creek Enhancement and Nelson Ranch Sustainability Project.

PASSED AND ADOPTED by the Modoc County Board of Supervisors on the 9th day of October, 2012.



AYES: Supervisor Allan, Bullock, Cantrall, Crabtree & Byrne.


NOES: None.

ABSTAIN: None.

ABSENT: None.


Patricia Cantrall, Chairman

ATTEST:


Stephanie Wellemeyer, Clerk of the Board